AGRICULTURAL POLICIES

in

AFRICA AND WEST ASIA

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Foreword

Five previous reports by the U. S. Department of Agriculture have described agricultural policies of foreign governments. They are:

- Agricultural Price-Supporting Measures in Foreign Countries, F.S.-56, Bureau of Agricultural Economics, Foreign Agricultural Service, July 1932.

- "Foreign Agricultural Policies--A Review and Appraisal," in Foreign Agriculture, January and February 1938.

- Agricultural Market and Price Policies in Foreign Countries, Foreign Agriculture Report No. 74, Foreign Agricultural Service, September 1953.

- Agricultural Policies of Foreign Governments--Including Trade Policies Affecting Agriculture, Agriculture Handbook No. 132, Foreign Agricultural Service, September 1957.

- Agricultural Policies of Foreign Governments--Including Trade Policies Affecting Agriculture, Agriculture Handbook No. 132, Economic Research Service, revised March 1964.

The first four reports are out of print and unavailable for distribution but may be consulted in public or university libraries.

This report is intended to provide a periodic review of those agricultural policies which have a significant impact on the level or composition of agricultural production and trade of Africa and West Asia, or on U.S. agricultural trade. It is based largely on agricultural policy reports submitted in early 1967 by U.S. agricultural attaches stationed in Africa and West Asia. The policies described are basically those which prevailed in early 1967. In some instances more recent data have been supplied by the authors to give recognition to events which may effect important changes in policy. At the time this report was prepared, policy changes brought about by the Arab-Israeli armed conflict in 1967 remained unclear. They may be only temporary in nature and are not discussed herein. Similarly, the effects on Nigeria's agricultural policy of the disorders in that country cannot be appraised.

Other regional policy reports have been published for the Western Hemisphere, Foreign Agr. Econ. Rpt. No. 36, October 1967; the Far East and Oceania, Foreign Agr. Econ. Rpt. No. 37, November 1967; and Europe and the Soviet Union, Foreign Agr. Econ. Rpt. No. 46, June 1968.

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Metric tons (2,204.6 pounds) are used throughout the report unless otherwise specified; area is given in acres or hectares (1 hectare = 2.47 acres). Prices and values are indicated in U.S. dollars except where local currency units are given.

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*Not all countries of Africa and West Asia are included.

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Summary

No area of the world has shown as much political change as Africa in the 1950's and 1960's. In 1950, there were four independent countries in Africa; by 1968, the number had grown to 40. The Overseas Provinces of Portugal (Angola, Mozambique, Portuguese Guinea, Sao Tome and Principe) make up the largest expanse of African soil still closely affiliated with a European power. Government policy toward agriculture has been greatly influenced by this change from colonial to independent status.

Each country's agricultural policy is unique. Summarization for a wide area extending from Iran and Iraq to South-West Africa and the Republic of South Africa is impractical. Even so, the agricultural policies of many of the countries of Africa and West Asia do show certain similarities.

Unlike the pool system often used in North America and Western Europe, price supports in Africa and West Asia frequently take the form of purchases made by a quasi-governmental marketing board or stabilization fund. These purchases are usually of export commodities and are made at prices fixed before the marketing season begins. The methods of the marketing boards of Nigeria are a good example of this form of price support.

Subsidies in Africa and West Asia are seldom paid in cash but in the form of at-cost or below-cost sales of fertilizers, insecticides, irrigation water, and farm machinery and implements. Such sales are often made by government agencies.

Despite Africa's change from colonial to independent status, many of the newly independent countries still trade mostly with the former mother countries. However, the pattern of trade is changing as countries seek additional markets for their exports. Some African nations have developed considerable trade with the Communist bloc; others trade with Japan, often buying more than they sell.

West Asia's trade is affected by the traditional enmity between Israel and the Arab States. Some West Asian countries trade extensively with the Communist bloc.

Almost every country in Africa and West Asia has a development plan, usually of 5 years' duration. Such plans are relatively easy to write but harder to implement and to make pay off. Often these plans emphasize more expensive mechanization than may be warranted by conditions within the country.

In an area with such a wide range of farming practices--all the way from primitive cultivation with a short-handled hoe to the most modern tractor operations--what might be called improvement in one country would not be considered improvement in another. Improvement takes many forms: a better variety of semidwarf wheat in Turkey, ox-farming in The Gambia, improved oil palm seedlings in the Ivory Coast, additional irrigation water from the High Aswan Dam in the United Arab Republic. In one way or another, agriculture is moving ahead in Africa and West Asia.

Much of Africa's farmland is held under tribal ownership rather than by individuals. In some developed sections, freehold (individual) ownership is coming into use, but often the problems of tribal ownership are simply replaced by the problems of individual ownership.

Technical assistance in agriculture continues to be furnished by the former mother countries. Also providing technical assistance are the FAO (Food and Agriculture Organization of the United Nations), the United Nations itself, and the EEC (European Economic Community), as well as European, Asian, and North American countries with no former colonial interest in Africa. With independence, many African countries have received assistance from the United States. Because of the scarcity of American technicians who are well versed in the growing of tropical tree and field crops, U.S. assistance has generally been in such fields as extension, credit, cooperatives, community development, and range management. Certain countries, such as Iran, Israel, and Lebanon, have shown so much progress that U.S. technical assistance plans have been terminated.

Some countries have accepted agricultural assistance from so many countries that serious administrative problems have resulted. Others have not had enough trained administrators in their governments to draw up assistance plans and make applications for aid.

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Agricultural Policies in Africa and West Asia

by the Africa and Middle East Branch
Foreign Regional Analysis Division

Introduction

The 40 independent nations of Africa belong to a wide array of multilateral trade and development associations (see table 1, p. 2). The country accounts do not cover all the regional arrangements or associations. The more important of these are described below.

Eighteen of these countries--former colonies and U.N. Trust Territories of France, Belgium, and Italy--are Associated Overseas Countries (AOC) of the European Economic Community (EEC). Twelve other countries are members of the British Commonwealth.

The forerunners of the AOC were the colonial preference systems, the franc zone systems in particular. To accommodate these systems within the EEC, the first Convention of Association was devised under the Treaty of Rome in 1957. Its aim was to replace the protected market these colonies had enjoyed in France with a market in all EEC countries, and to spread the cost of development aid among the whole Community. The second Convention of Association, signed at Yaounde in July 1963, extended the African states' association with the EEC until 1969, and reflected the newly gained independent nationhood of these former colonies. The EEC pledged $730 million to aid in this transition and in the development of the AOC. The agreement on trade preferences provided that the AOC would benefit from the successive tariff reductions in intra-EEC trade. EEC duties on several tropical agricultural products of the AOC were abolished upon entry into force of the Yaounde Convention. The Associated Overseas Countries--except the non-franc zone countries of Burundi, Congo (Kinshasa), Rwanda, and Somali Republic--grant preferential treatment to EEC exports. Most of the franc zone AOC members belong to either the UDEAO (Union Douaniere des Etats de l'Afrique de l'Ouest--West African Customs Union) or the UDEAC (Union Douaniere et Economique de l'Afrique Centrale--Central African Customs and Economic Union).

In 1959, seven former members of the French West African Federation formed the UDEAO. The UDEAO customs duty for French and franc zone commodities is zero, and goods from the other five EEC members receive a 40-percent reduction in duty. However, two member countries, Ivory Coast and Mauritania, grant duty exemptions on goods from all EEC members and from AOC.

In 1959, four former members of French Equatorial Africa formed the Equatorial African Customs Union (UDE), and were joined later by Cameroon. In 1966, this organization was succeeded by the UDEAC. The UDEAC has a common external tariff which exempts EEC members, African franc zone countries, and Algeria. The UDEAC treaty also provides for the coordination of development

Table 1.--Independent countries of Africa in mid-1968 and the membership of selected multilateral trade and development organizations in Africa

Country	EEC-Associated Overseas Countries (AOC)	West African Customs Union (UDEAO)	Central African Customs and Economic Union (UDEAC)	British Commonwealth	East African Community (EAC)
Algeria					
Botswana				X	
Burundi	X				
Cameroon	X		X		
Central African Republic	X		X		
Chad	X		X		
Congo (Brazzaville)	X		X		
Congo (Kinshasa)	X				
Dahomey	X	X			
Ethiopia					
Gabon	X		X		
Gambia				X	
Ghana				X	
Guinea					
Ivory Coast	X	X			
Kenya				X	X
Lesotho				X	
Liberia					
Libya					
Malagasy Republic	X				
Malawi				X	
Mali	X	X			
Mauritania	X	X			
Mauritius				X	
Morocco					
Niger	X	X			
Nigeria	1/			X	
Rwanda	X				
Senegal	X	X			
Sierra Leone				X	
Somali Republic	X				
South Africa				2/	
Sudan					
Tanzania				X	X
Togo	X				
Tunisia					
Uganda				X	X
United Arab Republic					
Upper Volta	X	X			
Zambia				X	

1/ Treaty signed in July 1966, but not yet ratified.
2/ Withdrew from Commonwealth in 1961, but continues to give and receive certain Commonwealth preferences.

investment and fiscal regulation among its members.

Two franc zone AOC members, the Malagasy Republic and Togo, do not belong to the UDEAO or the UDEAC. Malagasy Republic levies no customs duties on EEC and franc zone commodities; Togo grants preferential treatment to EEC members. Although not a member of the AOC, Algeria extends tariff preferences to the EEC. With few exceptions, Algerian exports to the EEC enter duty free or under a preferential system.

Many African countries receive tariff concessions from the United Kingdom and other members of the British Commonwealth, but only two African members of the Commonwealth, The Gambia and Malawi, grant tariff preferences to goods from non-African members of the Commonwealth. The Republic of South Africa withdrew from the Commonwealth in May 1961 but continues to grant and receive certain Commonwealth tariff concessions.

Bilateral trade agreements are important to the Republic of South Africa. Of specific interest to the United States are the Republic's strong trading arrangements with Japan, which involve South African exports of corn and grain sorghum, and bilateral agreements with Rhodesia and Malawi with regard to South African imports of tobacco. South African canned fruit continues to enjoy preferential tariff treatment in the U.K. market, but the margin of preference on certain canned fruits was reduced as the result of Kennedy Round negotiations.

Nigeria is the only Commonwealth country that accords preferential treatment to EEC commodities; only a limited number of commodities are involved, however. In July 1966, Nigeria signed an agreement of association with the EEC under which its exports would enter the EEC at the same preferential rate enjoyed by AOC's members with the exception that the most important exports would be subject to quotas. This agreement has not been ratified by all the Parliaments of the member countries.

The Commonwealth countries of Kenya, Tanzania, and Uganda form the EAC (East African Community), a customs union that has developed gradually during the past 30 years. Established in December 1967, the EAC combines the former East African Common Market and the East African Common Services Organization. The EAC has a common external tariff, with virtually free trade between members. However, a member may impose a transfer tax on specified manufactured goods from either of the other two countries in order to correct a trade deficit. The East African Development Bank is being formed to promote balanced development among the member countries.

The Sudan applies preferential import duties to products originating in and imported from the United Arab Republic. The UAR and the West Asian Arab countries (Iraq, Jordan, Kuwait, Saudi Arabia, and Syria) apply preferential rates to specified products imported from each other. In the UAR, foreign trade is virtually a monopoly of the Government, with imports restricted to basic foods, essential industrial raw materials, and capital goods.

Tariffs in Iran and Israel are nonpreferential. However, a limited number of agricultural commodities imported by Iran are governed by bilateral agreements and may be imported only from the partner country. Since 1962, Israel has gradually liberalized its import regulations and only about 15 percent of imports remain subject to effective licensing. Israel has embarked on a vigorous program to expand its exports of citrus and other fruits. A bilateral agreement with the EEC provides for some reduction in import duties (on a nondiscriminatory basis) for a few Israeli products, such as grapefruit and avocados.

Turkey became an Associate Member of the EEC in December 1964. EEC quotas have been established for Turkish tobacco, filberts, raisins, and dried figs; within the quota limit, these commodities receive preferential tariff rates. The EEC and Turkey reached agreement on December 1, 1967, to extend tariff preferences to certain other export commodities.

The Kennedy Round of tariff negotiations, the sixth round of negotiations under the General Agreement on Tariffs and Trade (GATT), was of great importance to the policy-makers of countries in Africa and West Asia. Exports from these generally underdeveloped countries are primarily agricultural raw materials, and the market for them has been concentrated in the developed countries. The Kennedy Round negotiations further reduced tariffs on raw materials going to the main developed countries. Agricultural raw materials now generally do not draw duties, and where duties are applied, they are moderate. Tariffs are more common on foodstuffs and are quite high in some instances. However, nontariff restrictions or protective devices in developed countries are greater obstacles than tariffs to African and West Asian exports of foodstuffs.

Kennedy Round agreements on coffee, cotton, and cocoa beans were particularly important as they, altogether, improved the access of these products to major markets. (Coffee, cotton, and cocoa are the chief agricultural exports of Africa; cotton is the top export of West Asia.) Among the Kennedy Round changes were the following reductions on coffee tariffs: Japan, from 30 percent to zero; the EEC, from 16 percent to 9.6 percent; and the United Kingdom, a cut of 50 percent in the existing duty. Coffee imports by the United States remained duty free. For cotton, there were no important changes. All cotton enters the EEC and Japan duty free, as do nearly all United Kingdom imports. No action was taken to change U. S. cotton duties; most of the cotton imported by the United States carries an 8.1 percent duty. For cocoa beans, the Kennedy Round brought significant duty reductions in the United Kingdom and Japan, both of which abolished all duties. The EEC reduced its statutory rate of 9 percent on cocoa beans to the effective level of 5.4 percent; therefore, no practical reduction in duty was achieved. Cocoa beans imported by the United States still bear no duty. Tariffs on cocoa products were reduced by the United States.

The differences between duties on agricultural raw materials and duties on manufactured or semimanufactured products of those raw materials were not eliminated by the Kennedy Round. Tariff rates on most groups of raw materials increase in proportion to the degree of fabrication. This condition tends to hinder the establishment of facilities in African countries to process local products.

Africa

CAMEROON

The Federal Republic of Cameroon is devoting much attention and effort to the agricultural sector of its economy. Agricultural policy has two overall objectives: first, to increase export earnings from agricultural products, and second, to make Cameroon more self-sufficient in basic food crops. Within this framework, policy also aims to diversify agricultural production and to improve the quality of agricultural products.

To establish a functional agricultural policy, the Federal Government is integrating and coordinating the administrative activities of East Cameroon and West Cameroon. Prior to independence, the East was administered by the French and the West by the British.

Prices, Markets, and Foreign Trade

Cameroon's foreign trade is oriented primarily toward France and to a lesser degree toward the other countries of the European Economic Community. Agricultural products, led by coffee and cocoa, provide about three-quarters of total exports. In 1965, Cameroon had its first trade deficit; this was due to a large increase in imports and the collapse of world cocoa prices, which caused a decrease in the value of exports. Cameroon has some industry, including a huge aluminum factory at Edea. However, since no commercially useful deposits of minerals have been discovered, and it will take time to establish more industries, Cameroon will continue to rely on agricultural commodities for export earnings.

As an associate member of the EEC, Cameroon applies a preferential tariff and import licensing to the EEC countries and other franc zone countries. Cameroon is also a member of the UDEAC (Union Douaniere et Economique de l'Afrique Centrale--the Central African Customs and Economic Union), which came into being January 1, 1966. This Union is composed of five countries: Cameroon, Congo (Brazzaville), Central African Republic, Chad, and Gabon. In addition to the progressive establishment of a customs union, the five members are studying ways of establishing greater economic cooperation, such as harmonizing labor codes and coordinating development investments. Within Cameroon, the customs barrier between East and West, a carryover from pre-independence, was completely removed in 1966.

Agricultural Development and Productivity

Cameroon has a Twenty-Year Development Plan which aims to double per capita income. This overall Plan is being executed in 5-year stages. The First Five-Year Plan emphasized the development of infrastructure; the Second Plan, now in effect, stresses agricultural development. To achieve economic development, Cameroon has chosen a "liberal but planned" economy--one that combines free enterprise and Government planning. The rural development program of the Plan is based on the realization that development must be both cultural and economic. The Plan outlines the organization of 30 model centers of rural development, the establishment of farm cooperatives, farm credit, and farm insurance programs, and the development of industrial projects in food processing for each agricultural and geographic sector. It also envisions the formation of several development corporations patterned on the successful French-operated cotton and textile enterprise, Compagnie Francaise pour le Developpement des Fibres Textiles (French Company for the Development of Textile Fibers).

Four main methods are proposed to improve the agricultural situation: (1) Improvement of yields through pest and disease control and greater use of fertilizers; (2) extension of areas under cultivation; (3) specialization of production; and (4) increased culture of certain export crops as well as a wider variety of crops. The plan envisages a doubling of agricultural production in the next 5 years. Cotton, rubber, tea, rice, and sugar are to be increased significantly, but the single most important expansion program will be in oil palm products. Some of the traditional food crops of low nutritional value will be replaced by more nutritious crops.

Producers of primary crops, mainly cocoa and coffee, are protected to a limited degree from world price fluctuations by guaranteed prices. These are handled by the

Stabilization Funds in East Cameroon and by the Marketing Board in West Cameroon. In August 1966, the Cocoa Price Stabilization Fund established a uniform price to producers located anywhere in the country, regardless of the cost of transportation. For the 1967/68 crop year, the price per ton for superior grade cocoa was $263, for average grade, $223, and for substandard grade, $101. The 1967/68 coffee price was $466 per ton for Grade 1 coffee delivered at Douala.

Subsidies are provided by the Government for control of diseases and insects attacking cocoa. Financial aid to control blackpod disease is provided to any village or group of villages with an organized Village Committee and at least 1,236 acres planted to cocoa. Capsid insect control is carried out by the producers in cooperation with the Government Capsid Control Service. The Government also provides payments through the Village Committees for the purchase of fertilizer, for pest control, and for improved seeds of some crops.

Export crops are marketed by various large organizations. In East Cameroon, the Stabilization Funds market cocoa, coffee, peanuts, and cotton. In West Cameroon, the Marketing Board markets cocoa, coffee, and palm products. Other products are marketed either by large-scale private traders or by producers' cooperatives. The Marketing Board in the West also intervenes directly or indirectly in the domestic marketing of crops under its control.

Agricultural Aid

Economic development in Cameroon will continue to depend on foreign aid and technical assistance. France, the EEC, and the United States are major sources of aid. Since Cameroon gained its independence, it has gradually lost its preferential markets. To help the country adjust to this loss and to encourage diversification, the FED (Fonds Europeen de Developpement--European Development Fund) of the EEC has allocated $15.8 million. In the past, the larger portion of aid has tended to flow into the East; at present, the Government is trying to correct this situation. The primary funnel for aid into the West is CAMDEV (the Cameroon Development Corporation), which is run by the Commonwealth Development Corporation. In 1967, the World Bank and the FED granted a loan of $24.4 million to CAMDEV to expand its production of palm oil, tea, rubber, and pepper. Palm oil production will receive the most emphasis.

Through 1967, the United States provided $29 million in various types of aid, including loans, grants, technical assistance, and some Public Law 480 assistance. In recent years, the Federal Republic of Germany has increased its program of aid to Cameroon. Israel and the Netherlands have also extended aid and technical assistance. Probably the single major development project is the Trans-Cameroonian Railway which is under construction now and is being financed from various sources. The United States has financed one-third of the cost of the first section of the railroad. Cameroon also participates in some regional development projects, such as the Chad Basin program. The UDEAC is considering regional development projects financed from several sources of foreign aid and from local resources. (Mary T. Chambliss)

CONGO (KINSHASA)

Congolese policy is primarily concerned with recovery from the unrest of recent years. This goal was attained to some degree in 1966 when the country achieved greater stability.

In June 1967, the Congo Government took a major step toward economic recovery and progress by enacting a monetary reform program to restore the profitability of agricultural production, especially for export. The reform devalued the Congo franc to 500 francs to the dollar for all transactions. Previously the buying rate was 150 francs to the dollar and the selling rate 180 francs. New currency units were established. The main unit is the zaire, which equals 1,000 Congo francs or $2.00.

Prices, Markets, and Foreign Trade

The Government has established price controls over many consumer goods, including food and fiber items. In effect, these controls place a limit on the price paid to the producer of the raw products involved. The Government also practices the granting of concession areas or monopolies for the distribution of some types of seed and for the purchase of some harvested products. At present, the Government does not provide subsidies on agricultural inputs. Because the cooperative movement in the Congo has weakened since independence, one of the objectives of current agricultural policy is to revive the development of marketing and producer cooperatives.

A part of the June 1967 monetary reform was the liberalization of imports and the abolishment of the import quota system which had been used by the Government. At present there are no export subsidies, but the Government is considering the establishment of some measures, largely credits, to increase the export of oil palm products, tea, coffee, cocoa, and rubber. In the spring of 1967, the "retrocession" of foreign exchange which agricultural exporters could retain was increased to 35 percent. Some beneficial effects have been felt from this action.

Recently, the Congo signed a number of bilateral trade agreements with neighboring African countries; these do not yet include long-term purchase agreements. Typically, these agreements provide for the exchange of Congolese manufactured goods, such as cement, for needed food commodities. Congolese trade, both export and import, remains primarily oriented toward Western Europe and the United States. The Congo does not usually trade with the Communist countries.

As an associate member of OCAM (Organisation Commune Africaine et Malgache--Joint Afro-Malagasy Organization), the Congo has signed the OCAM sugar agreement. This agreement provides for the purchase by the signatories of sugar produced in Madagascar and Congo (Brazzaville). In effect, this means the Congo will be paying more for its required sugar imports than it paid in the past. Congo is also an associate member of the EEC and a signatory of the Yaounde treaty. However, the Congo continues to adhere to its traditional policy of nondiscrimination. For this same reason, it has so far refused to join the UDEAC (Union Douaniere et Economique de l'Afrique Centrale--Central African Customs and Economic Union).

The Congo applies a uniform tariff rate to all countries. In June 1967, duties on almost all imports were raised as a part of the monetary reform to increase Government revenue.

Agricultural Development and Productivity

The recent stability of the Congo has enabled the Government to undertake development of a functioning agricultural policy. One step to reestablish agricultural policy is the work done by the IRES (Institut de Recherche Economique et Social--Economic and Social Research Institute) at Lovanium University, near Kinshasa. In 1966, the IRES drew up a plan for agricultural reconstruction, part of the general 5-year development plan. This plan has been submitted to the Government. The development plan projects an annual gross national product growth rate of 5 percent for

the period 1963-77. This growth rate is to be supported primarily by industrial expansion and investment. The average annual growth rate of the agricultural sector is projected at 1.8 percent during the same period. By 1972, commercial agricultural production is expected to have returned to 90 percent of the 1958 level.

Another step taken by the Congolese Government has been the division of the country into major agricultural regions. An agricultural commission was named to formulate policy for each region. The regional commissions first met separately; then, during the last months of 1966, all met jointly in Kinshasa and worked out a Provisional Plan for Agricultural Reconstruction (Plan Interimaire de Relance Agricole). This Provisional Plan has been submitted to the Government. The organizational objectives of the Plan are: (1) The reinstallation of 250 agriculturalists and veterinarians and 3,500 agricultural agents in the rural areas; (2) the establishment of 35 centers for seed multiplication and additional centers for local seed adaptation; (3) the operation of stations by the INEAC (Institut National pour l'Etude Agronomique du Congo--National Institute for the Agronomic Study of the Congo) to provide farmers with needed plant materials; and (4) the restoration of more than 5,800 miles of road to relieve congestion and provide regular movement of goods both to and from rural areas. The general aims of the Provisional Plan are to attain self-sufficiency in food production and to return to the 1960 export levels by 1970.

Agricultural Aid

Since independence, the Congo has received foreign aid from various countries and international organizations. This aid has consisted mostly of loans and grants. There has been some technical assistance on agricultural projects, chiefly from the United Nations and Belgium. The EEC has provided some public grants. Between fiscal years 1960 and 1967, total U.S. bilateral aid to the Congo amounted to $217.5 million; of this amount, about 40 percent was in food and other agricultural commodities. The United States has also provided aid through the United Nations; during the same period, this type of U.S. aid amounted to $130.5 million. (Mary T. Chambliss)

THE GAMBIA

Agricultural development and improvement is receiving high priority in The Gambia. Primary agricultural development objectives include (1) increased peanut production and exports to improve foreign exchange earnings and (2) self-sufficiency in rice production. Severe budgetary limitations since independence have limited agricultural development activities to very basic areas.

The Government operates 24 farming centers where selected local farmers enroll for training sessions of several weeks' duration in the growing of crops and livestock. The farmers are required to live at the centers during training. They learn from demonstrations the benefits of improved methods, such as the more effective use of oxen in the cultivation of peanuts. Upon completion of training, the farmers move back to their respective areas to employ practices recommended by the centers. Thus other farmers can observe the benefits of improved practices and pattern their own operations accordingly.

Periodically, the farming centers give several days of demonstrations in the use of improved equipment, and all farmers are urged to attend. In addition to the above measures, the Gambian Government, through the Department of Agriculture, subsidizes the prices

which farmers pay for imported steel plows and allows the payments to be spread over 3 years.

The Gambia Oilseeds Marketing Board (the agency responsible for marketing the local peanut crop) purchases peanuts from the growers at prices established by the Government. For the 1966/67 crop, farmers received 3.5 cents a pound. The Government also provides, on a limited basis, tractors and drivers to farmers at a minimum cost for plowing and preparation of higher yielding swamp areas for rice production.

Gambian trade policy is designed to give preferential treatment to the United Kingdom and the Commonwealth nations. The Gambia is a member of the Commonwealth.

The United Kingdom is the largest donor of development aid, part of which has been utilized in the farmer training centers and to purchase equipment for use in the riceland preparation program. (Snider W. Skinner)

GHANA

The stated agricultural policy of the Government of Ghana is to produce enough food to feed the country's population, to provide raw materials for domestic industries and for export, and to reduce the nation's dependence on imports. Primary emphasis continues to be placed on the diversification of agriculture.

Prices, Markets, and Foreign Trade

Fixed prices are paid for cocoa beans, Ghana's chief crop. For the 1967/68 main crop, a price of 10.61 cents a pound was paid. Palm products, coconuts, and bananas are also purchased at fixed prices.

Subsidies to farmers consist almost entirely of providing insecticides, spraying equipment, seedlings, and some machinery at reduced prices. These subsidies are generally restricted to export crops and crops expected to become of value as exports, such as rubber.

Export sales of cocoa beans are handled by the Cocoa Marketing Company, Ltd., a division of the Ghana Agricultural Produce Marketing Board. This Board also handles exports of palm kernels, bananas, and other such products.

Import duties are an instrument of economic and agricultural policy designed to encourage the local production of farm commodities now being imported. In early 1967, the following duties expressed in cedis (1 cedi = $1.17 at that time) per ton applied to the seven listed commodities: tobacco--441.00 cedis ($515); wheat flour--66.15 ($77); rice--66.15 ($77); vegetable oil--71.48 ($83); yellow corn--23.79 ($28); sorghum--19.91 ($23); and cotton (500-pound bale)--59.89 ($70). In July 1967, import duties on several commodities, including meat, milk, rice, flour, and sugar, were eliminated or considerably reduced.

Graduated export duties on cocoa beans are an important source of revenue for Government programs. In 1967, they were levied as follows: Up to an f.o.b. price of $336 per long ton, the amount is $28 per ton or 10 percent, whichever is less; when cocoa prices are between $336 and $728, the duty is one-half the difference between $280 and the actual price; when the price exceeds $728 per ton, the duty is equal to the difference between the price per ton and $504.

All agricultural imports require specific import licenses.

During the administration of former President Kwame Nkrumah, Ghana negotiated a variety of agreements with members of the Sino-Soviet bloc. In November 1961, Ghana and the Soviet Union concluded agreements on trade, technical assistance, long-term credits, and technical and economic cooperation. The Soviet Union agreed to import 35,600 tons of cocoa beans the first year, and to increase the imports to 61,000 tons the last year of a 5-year agreement.

Ghana has also concluded trade and payment agreements with Mainland China, Czechoslovakia, Yugoslavia, Hungary, Poland, Romania, Albania, Bulgaria, and East Germany. Outside the Sino-Soviet bloc, Ghana has signed trade agreements with Israel, United Arab Republic, Upper Volta, and Dahomey.

Ghana's export tax on cocoa beans has not been as great a deterrent to cocoa production as might be expected. The farmers of Ghana might raise more cocoa if they received a bigger share of the selling price, but the extent of such an increase in production is difficult to estimate. The weather and control of swollen shoot disease and capsid infestations are the primary factors affecting the size of the annual cocoa crop.

Ghana is one of the 12 countries making up the West African Common Market, sponsored by the U.N. Economic Commission for Africa. This new common market is still in the early stages of organization and development.

Agricultural Development and Productivity

As part of its announced plan to increase domestic food production, the Government of Ghana is encouraging the diversification of agriculture. Crash programs for corn and sorghum are progressing satisfactorily. Rubber, tobacco, rice, coconuts, oil palms, vegetables, and poultry are also receiving special attention.

Farm institutes have been established in the eight regions to promote agricultural efficiency. Seven of these schools, located at Navrongo, Nyangpala, Wenchi, Ejura, Kwadaso (Kumasi), Asuansi, and Ohawu, received support from the U.S. Agency for International Development (USAID). The institute at Adidome was developed by the USSR.

The Volta River Dam project was completed in early 1965. Over 3,275 square miles of land around the lake formed by the dam at Akosombo is flooded at high water. This ground will be used for cultivating rice and other crops. The 70,000 persons driven from their homes by the rising water are being resettled.

Ghana's chief agricultural research institution is the Cocoa Research Institute of Ghana at Tafo. Formerly known as the West African Cocoa Research Institute, the research station previously did cocoa research for all of British West Africa, but its responsibility is now limited to Ghana. The Cocoa Research Institute has huge test groves of cocoa trees, including the famous "square mile."

A central agricultural experiment station of the Crops and Soil Science Division of the Ghana Academy of Sciences is located at Kwadaso. It conducts research on crops other than cocoa.

There are three agricultural research institutes associated with the University of Ghana at Legon. The institute at Kade deals with forest crops, the one at Nungua with animals; and the one at Kpong with the irrigation of rice, sugarcane, cotton, and pasture crops.

Agriculture plays a relatively large role in Ghana's educational system. Children from 6 to 11 years of age are taught gardening in the elementary schools; in the middle schools, students from 11 to 15 receive instruction in both gardening and agriculture.

A faculty of agriculture is one of five faculties at the University of Ghana. There is a school of agriculture at the University of Science and Technology at Kumasi.

Ghana's agricultural extension service is still largely a heritage from the British, modified to some extent by an extension project sponsored by the USAID. Ghana has a number of agricultural stations throughout the country. In 1967, these stations had 55 senior agricultural extension officers and about 300 junior officers.

The State Farms Division of the Ministry of Agriculture established 114 state farms throughout the country, but only 15 to 20 of these were of significant size. However, the new Government is not committed to the state farm principle. State farms produce such crops as rubber, palm oil, copra, yams, and cassava.

Agricultural Aid

Since attaining its independence in 1957, Ghana has asked for and received technical assistance from FAO and from various countries of the world, in both the East and West. FAO technical assistance is being given in fertilizer testing and forecasting of cocoa production. USAID technicians have made an outstanding contribution toward establishing a large-scale rubber industry, and have also been actively engaged in practical research in the growing of corn, sorghum, kenaf, and vegetables. The USAID has projects in operation in agricultural extension, agricultural education, agriculture and livestock surveys, and farm mechanization. By late 1965, 187 senior officers of the Ghana Ministry of Agriculture had received training in the United States.

Ghana first received food aid from the United States in 1966 through a sizable program under Title 1, Public Law 480. Other substantial programs have followed. Because of Ghana's present poor financial condition, these concessional imports are not likely to have much effect on the country's farm programs and commercial imports. (Snider W. Skinner)

GUINEA

The direction of Guinea's agricultural policy has been influenced by the country's severely restricted capabilities to purchase and import food and other consumer items due to a lack of foreign exchange. This has given rise to efforts to expand rice production in the coastal areas and to official statements indicating the Government's intention to produce cotton locally to meet requirements of the recently completed textile mill. At the same time, efforts have been made to improve production of coffee, once an important source of revenue in Guinea. Progress in the abovementioned areas has not been as great as the Government had anticipated.

Guinea's agricultural exports have been increasingly committed under barter arrangements with Communist countries. Although Guinea's tariff policy is nondiscriminatory, all imports and exports must be licensed.

Relatively small proportions of the substantial foreign aid expenditures made in Guinea have been directed to agricultural development. Aid sources include the United States, West Germany, and Communist countries. U.S. aid totaled nearly $70 million by the end of fiscal year 1966, including a substantial amount of food under Public Law 480. (Snider W. Skinner)

The major features of the agricultural policy of the Ivory Coast are:

(1) An active diversification program emphasizing production of oil palms, coconuts, sugar, cotton, and rubber. This program would help to reduce the traditional dependence on coffee and cocoa as export crops. Efforts are also underway to expand production of rice, with the aim of replacing current annual imports of about 90,000 tons. Eventually, it is hoped that there will be a rice surplus for export.

(2) Establishment of priority areas for agriculture, particularly in the underdeveloped north and the underpopulated southwest.

(3) Institutional changes, including an improved land tenure system.

Prices, Markets, and Foreign Trade

Coffee, cocoa, and cotton are purchased by the Caisse de Soutien et de Stabilisation des Produits Agricole (Agricultural Products Support and Stabilization Fund), formerly the Caisse de Stabilisation Cafe et Cocoa (Coffee and Cocoa Stabilization Fund). Guaranteed prices for these three products are established each year just prior to the opening of the new marketing season. For the 1967/68 season, the guaranteed price for coffee was 16.5 cents a pound and for cocoa 12.9 cents a pound. For the 1966/67 season, the guaranteed price for Allen cotton (seed basis) was 6.2 cents a pound and for Mono cotton, 5.5 cents a pound.

Cocoa farmers can buy fertilizer at one-third of cost and spray equipment and spray material at two-thirds of cost. Seeds of higher yielding hybrid cocoa varieties are made available to farmers free of charge.

Sodepalm (Societe pour le Developpement et l'Exploitation du Palmier a Huile--Society for the Development and Exploitation of Palm Oil) provides various forms of assistance for establishing oil palm plantings. Sodepalm assumes the expense of taking plants from the nursery to the farmers, actual planting of the seedlings, seeds and fertilizer for the cover crop, fencing, management assistance, surveying, and land registration. Sodepalm will provide facilities for processing and marketing oil palm products.

The Ivory Coast levies a complex series of duties on imports, including those of agricultural products. These duties tend to make imported goods relatively expensive to the consumer. Import duties are lower for products from the franc zone than from other sources; this favored position is especially important to France.

Although the Ivory Coast has shown some interest recently in other sources of supply, it continues to favor imports from France and in turn receives concessions for exports of its products to France. These regulations are implemented chiefly by quotas, tariff preferences, and foreign exchange controls. Under a bilateral trade agreement, France guarantees to purchase 88,000 tons of coffee annually if prices drop below a specified level. However, during the past three seasons, the world market price has remained above the price specified in the agreement. France also gives preferential tariffs on bananas and pineapples. The Ivory Coast imports all its wheat, sugar, and edible oil requirements from France, as well as specified quantities of milk products, wine and other beverages, cotton cloth, and jute bags. The traditional preferences given by France and recent concessions granted by the EEC were largely responsible for the establishment of export industries for certain food products, particularly bananas and pineapples.

An export tax of 4.1 cents a pound is levied on cocoa beans and the cocoa bean equivalent of cocoa product exports. Apparently this tax is for revenue and is not intended to inhibit exports of cocoa. It has had no discernible effect on production and export of cocoa.

Small quantities of coffee and cocoa are exported each year to a number of East European countries. Exporters of coffee and cocoa have been urged by the Government to find additional markets in Communist countries, but such efforts have met with little success.

Small quantities of low quality rice are imported from Mainland China from time to time.

Agricultural Development and Productivity

Under the current development plan for the Ivory Coast, production of all principal crops, except coffee, is to be increased. At the same time, more investments will go into agricultural processing industries, such as grain milling and fruit canning. By 1970, investments in palm oil are expected to reach $154 million. Cotton, rice, and coconut investments will total $34 million. Investments in sugarcane will amount to $13 million and in rubber to at least $9 million.

To improve farming efficiency, the extension service is being expanded and an agricultural mechanization agency has been established to provide custom services to farmers.

A proposed new property law establishes state rights over unregulated land, permits present users to acquire full and complete ownership, and gives the Government power to seize land after due compensation.

Under the current educational plan, public school students will be tested after 5 years of preliminary education to determine who should continue. Those less qualified will be given a final year of schooling stressing practical training in farming, fishing, and handicrafts.

Agricultural Aid

The Ivory Coast has received massive technical assistance in agriculture in recent years. During 1951 to 1965, French assistance of all kinds totaled $45 million, of which $13 million went to development and production and $9 million to infrastructure improvements. Substantial portions of these expenditures went to agriculture.

In recent years, the EEC, through the FED (Fonds Europeen de Developpement--European Development Fund), has also been an important contributor to the agricultural economy of the Ivory Coast. From 1964 through 1968, the FED will have put over $46 million into agricultural production improvements and diversification in the Ivory Coast. The major portion of this money has gone into the oil palm project.

About 160 Nationalist Chinese (Taiwanese) technicians are working with the Ivoiriens in efforts to improve upland rice production and to develop irrigated production. West Germany has made funds available to the Ivory Coast for rice production improvements. Direct or indirect agricultural development assistance has also been contributed by the United Nations, Israel, and the Netherlands.

The largest item of U.S. assistance has been a loan of $36.5 million by the Export-Import Bank toward construction of a hydroelectric project on the Bandama River. Approval of this loan was announced in late 1967. Previously, U.S. assistance had been limited primarily to rice and tallow programs under Title I and Title IV, Public Law 480. Some commodities have also been made available under Title III. (Snider W. Skinner)

With social improvement as a guide, this primarily agricultural country has set development targets which will permit the agricultural sector to continue as the largest productive area. Strong emphasis has also been placed on tourism and industrialization, and it is anticipated that these industries will utilize increased amounts of agricultural raw materials.

Both from an agricultural and an industrial standpoint, production is stressed for those commodities needed in the local economy and for which satisfactory markets exist abroad. However, for commodities which cannot compete internationally, the policy is to limit production to quantities needed for local consumption.

Prices, Markets, and Foreign Trade

Kenya has a score of statutory authorities concerned with some phase of the production and marketing of agricultural products. These regulatory groups are usually under the supervision of the Ministry of Agriculture. The activities of these boards and authorities range from issuing licenses to establishing standards, allocating production quotas, fixing taxes, regulating development projects, and carrying out the processing and marketing of products. Generally, the board or authority performing a marketing operation has a statutory monopoly for a specific crop, while pricing policies vary. Some boards fix prices; others leave them to the open market. There is, however, some governmental effort to stabilize prices through the marketing boards to hold down the cost of living and to permit exports without subsidies.

Among the more specialized marketing boards are the Coffee Marketing Board and the Tea Authority. The functions of these boards vary widely. Generally, commodities are marketed through the various authorities or boards, which work with and through cooperative organizations serving as their agents. When cooperative societies are not available, the boards authorize regular traders to be their agents. There is a strong tendency toward compulsory marketing through the central marketing organization, and usually these are the only markets available.

The Coffee Marketing Board makes returns to growers through cooperatives. The actual advance that a coffee producer receives at the time he delivers his crop depends upon the effectiveness of his cooperative and his credit at the agricultural bank. The final return received by the farmer each year varies and is dependent on the world market price received by the Coffee Marketing Board, less the Board's costs and assessments, less the cost of the cooperative operation.

The function of the Tea Authority is quite different. The tea market is free, and producers can sell direct to overseas markets through their cooperatives or by auction.

Formerly there were three marketing boards for general farm produce: the Maize Marketing Board, the West Kenyan Marketing Board, and the Agricultural Production Marketing Board. These have been reorganized into one board, called the Maize and Produce Marketing Board, which now handles the marketing of storable commodities, such as corn, rice, peanuts, castor beans, sesame, cashew nuts, beans, and peas. It is the stated policy of the Board that it maintains reasonable internal prices even when world prices are low. Prices to be paid producers are established prior to the beginning of the marketing year. However, when a loss is sustained because of a drop in the export price for a particular commodity, the price to the farmer is adjusted or reduced the following year. In

1967, corn--the most important single agricultural commodity in Kenya--had a fixed support price for the first time.

The Government has attempted to avoid subsidies in agriculture. There is, however, a subsidy on commercial fertilizer.

A significant step was taken on December 1, 1967, when the East African Community (EAC), a new common market for Kenya, Uganda, and Tanzania, came into being as provided in a treaty signed by the Presidents of the three member countries on June 6, 1967. The formation of this new trade group is a major step in African economic cooperation and development. The EAC replaces the East African Common Market (EACM), a de facto customs union. The main objectives of the EAC are: To establish and maintain revised common customs and excise tariffs; to modify restrictions on regional trade; to introduce a common agricultural policy; to establish the East African Development Bank; to continue operation of such common services for the three countries as airway, port, railroad, postal, and telecommunication facilities; and to coordinate transport policy and operations.

The chief purpose of the new East African Development Bank (EADB) now being established is to hasten industrial development, primarily in Uganda and Tanzania. (Kenya at present dominates East African industry.) The EADB will be headquartered in Kampala, Uganda. Of its authorized capital of $56 million, $16.8 million will be subscribed by Kenya, Uganda, and Tanzania, and the remainder by institutions or organizations that wish to be members of the bank. The EADB will be required to make 38.75 percent of its investments in Uganda, 38.75 percent in Tanzania, and 22.5 percent in Kenya.

The treaty under which the EAC was formed also provided for the introduction of a transfer tax, another measure to promote balanced industrial development among the three countries. According to the treaty, any of the three EAC member countries that has a deficit in its total trade of specified manufactured goods with the other two countries may impose transfer taxes on such goods originating in those countries.

Agricultural Development and Productivity

Kenya's Six-Year Development Plan (1964-69) has been replaced by a revised Five-Year Development Plan (1966-70). Although the new Plan has not changed the Government's primary objective of advancing agriculture through improved cultural practices, major increases in important crops, and diversification, it advances target dates and incorporates more self-help schemes. The Plan emphasizes that over 90 percent of the country's land has agricultural potential. It is estimated that some 17 million acres are well suited to many crops, another 8 million acres are suitable for some crops and the raising of livestock, and an additional 105 million acres can be used for livestock and by the wildlife which are a valuable asset to Kenya.

Since approximately 75 percent of the people earn their living from agriculture, some $108 million has been allocated to agriculture under the revised Plan. Of this amount, about 35 percent has been designated for the "Million-Acre Settlement Scheme." This Government scheme was designed to relieve population pressures in overcrowded areas by settling unemployed and landless Africans on agricultural land formerly occupied by Europeans. Two types of distribution have been made. Small family-sized areas are distributed to formerly landless uninitiated "new" farmers and larger areas go to the more qualified. However, it is the policy of the Government to maintain large-scale farming in the areas ecologically unsuited for intensive small-scale farms. This latter policy has been faced with difficulties, such as that of providing skilled management

until adequately trained new owners can take over these large operations. Because of the dearth of qualified farm managers, the Government, with external aid, has begun to train managers for large operations and to increase the agricultural extension and advisory services available.

With the land transfer goal virtually reached--by the end of 1967, more than a million acres had been transferred to over 30,000 farmers--a program has been initiated to register and consolidate fragmented holdings into more economic farming units. The Government has also assisted with the transfer of farms on the open market. Other plans call for more credit for farmers, improvements to roads, and increased irrigation services.

Because of the rapid expansion of cooperatives in Kenya--over 800 have been established since 1963--the Government has sponsored a Cooperative Society Bill to assure good management. Some of the approximately 1,300 cooperative societies handle the complete processing and marketing of their products, others serve as collection agents, and some sell seed, fertilizer, and insecticide to their members.

Kenya has scheduled some $76 million for social services and educational facilities for the 5-year period of the Development Plan. Since all phases of agricultural activity are being expanded, there is a collateral need for an expansion of schools, teacher training facilities, agricultural officers, and extension workers.

Agricultural Aid

Kenya has been able to obtain agricultural aid and technical assistance from both international organizations and individual nations. A good portion of the planned expenditures under the revised 5-year plan will come from external sources. Grants and loans from the United Kingdom, the United States, the Scandinavian countries, West Germany, and Israel have supplied the bulk of the agricultural aid and assistance. The United Kingdom has been the largest single donor of funds for development.

During the food shortage that occurred in the 1965 drought, many countries supplied assistance to Kenya. The largest food aid program was 214,000 tons of corn shipped from the United States under Public Law 480, Title IV. An additional 30,000 tons were shipped under a famine relief program. Kenya also received about 14,300 tons of wheat under a tri-country Title IV wheat agreement, as well as commodities shipped under voluntary agency programs. A notable recent advancement to corn production in Kenya was brought about by exemplary international collaboration in technical aid--the development and promotion of the growing of varietal hybrid corn adapted to the commercial corn-producing area of western Kenya. This program is the result of research over the past 15 years supported by Kenya and the United Kingdom, coupled with an international exchange of seed, data, and technicians among Kenya, the United States, and Rockefeller Foundation staff in Mexico and other Latin American countries. This new variety, when used with a package of improved cultural practices, has increased substantially the level of corn production in Kenya. Other varieties are being developed for other corn-producing areas of the country. (H. Charles Treakle)

LIBERIA

Few changes have occurred in Liberian agricultural policy in recent years despite growing local recognition of the need for including agriculture in overall development

plans for the country. Except for rubber, agriculture has maintained a relatively low priority in the money economy of Liberia.

Under a new 5-year development plan, particular emphasis is placed on the production of rice and other food crops to provide a more adequate diet for the population and to reduce the sizable food imports into Liberia. Budget allocations for the improvement of agriculture have been relatively low; the Department of Agriculture was allocated about $1 million for 1966/67 operations out of a total national proposed operating budget of over $50 million. In recent years, only about 10 percent of foreign investments in Liberia, totaling an estimated $500 million, have been agricultural, and practically all of these have been channeled into the development and production of rubber. Most foreign investments currently are for the development and mining of iron ore.

Prices, Markets, and Foreign Trade

The Liberian Produce Marketing Corporation was established in 1962 as the exclusive export agency for coffee, cocoa, and palm kernels purchased at guaranteed prices from producers. The LPMC is jointly owned by the Government of Liberia and the East Asiatic Company. Management of the organization is almost entirely by East Asiatic officials and operating profits are shared equally by the Government of Liberia and the Company. The LPMC provides some extension assistance to producers and supplies small hand-operated coffee hullers on credit to village producer groups.

LPMC prices announced on April 1, 1968, were: Palm kernels, $8 a bag (168 lbs. net); Robusta coffee, 18 cents a pound; Liberica coffee, 18 cents a pound; and cocoa, 16 cents a pound.

Since prices paid to local producers by LPMC are generally above those paid in other West African countries, sizable quantities of coffee from neighboring countries have entered Liberia in past years. In general, the neighboring coffee has been advantageous to LPMC, since it has enabled a much larger volume of business to be done than would have otherwise been possible. Under limitations recently imposed by the International Coffee Organization on coffee shipments from Liberia and other nonmembers, contraband shipments through Liberia are expected to be reduced sharply.

In 1964/65, when cocoa prices were at low levels, the LPMC lost about $50,000 on its cocoa purchase operations. However, since cocoa is a relatively small item in LPMC's operation and international coffee prices were favorable, the cocoa loss was absorbed.

There is a Government-imposed ceiling on retail rice prices. In early 1967, this ceiling amounted to $9.50 per cwt. for imported rice in Monrovia ($10 per cwt. at interior points), and $8.50 per cwt. for locally produced rice.

The Government has no program for subsidizing the cost of fertilizers or other farm inputs to the producer.

Efforts to organize marketing groups, such as cooperatives, at the producer level are still experimental and exploratory.

A revised tariff schedule for Liberia became effective on April 1, 1966. The new schedule conforms to the Brussels nomenclature. In general, it merely combines the various customs charges under the old schedule with the fractional increases over former rates which resulted from rounding the total of combined charges to the next whole number.

Imports of agricultural and food items generally have been free of import controls.

There is virtually no trade in agricultural commodities between Liberia and Communist countries. However, this lack of trade appears to result from economic disadvantages rather than a specific policy against such trade, as a number of nonagricultural items from Communist areas are for sale in Monrovia.

A major difficulty in Liberian agricultural development is the absence of special trade concessions. This fact makes it impractical to develop processing of local agricultural commodities, because the domestic market is too small to absorb more than a fraction of output and most Liberian processed products would not be competitive on world markets without some preference, such as concessional tariffs.

Agricultural Development and Productivity

The formulation of a 5-year agricultural development plan began in 1966. The plan gives top priority to rice production, while other priority objectives include increased production of livestock, meat, fruits, vegetables, forest products, and tree crops. Despite enthusiastic support for the plan, its execution may be hampered by a small budget, lack of communication with the producers, and reluctance of subsistence producers to shift to more productive methods.

The Government of Liberia employs a palm oil specialist and a rubber specialist to work with producers of these crops to improve production. This assistance reaches only a small percentage of the agricultural sector. Efforts were underway in 1967 to reestablish the Agricultural Credit Corporation (a Government agency) to improve credit facilities available to farmers.

The number of farms classified as commercial has increased considerably over the past several years. The increase can be attributed chiefly to rubber farms owned by well-to-do Liberians who engage in farming as a sideline. There are no moves underway for land reform. Most of the land is Government owned, with tribal allocations.

Although substantial expenditures have been made in the development of education in recent years, relatively little has been done in the field of agricultural education. Moreover, there are no facilities available to train members of the farm population for other occupations. A number of villagers were drawn from the subsistence society into heavy construction work when the iron mining industry was being developed. With the completion of the road building and other heavy construction activities, sizable layoffs occurred, and many of these people drifted back to village society. There is an increasing problem in Liberia, as in other African countries, of villagers moving into the towns without adequate means of support.

Agricultural Aid

Approximately 20 percent of U.S. aid expenditures in Liberia from 1951 to 1961 went into agriculture. However, the proportion of U.S. aid spent on agriculture in recent years has declined substantially. In early 1967, there were only four U.S. technicians directly involved in agricultural development--a food and agricultural officer and a National Farmers Union contract team of specialists in cooperatives, agricultural credit, and crops. Other sources of foreign aid are Nationalist China with approximately 15 rice technicians, FAO with two rice specialists and one soil scientist, and a forest inventory team and a co-op specialist from West Germany. The U.N. Special Fund sponsors six faculty positions in the School of Agriculture, University of Liberia. A $630,000 slaughterhouse built with Yugoslav credit was completed and put into operation in 1966.

In addition to technical assistance, Liberia received 5,000 tons of rice from the United States in 1965/66 under Title IV,

Public Law 480, and about $400,000 in commodities (including wheat flour, dry milk, bulgur, and corn meal) under Title III. These were intended for use principally in school lunch programs. Liberia was scheduled to receive 3,800 tons of rice from the United States in 1967/68 under a Title I, P.L. 480 program. (Snider W. Skinner)

LIBYA

Petroleum is now the backbone of Libya's economy. Seventy percent of the petroleum revenues accruing to the Government are designated by law for economic development, although much less than this amount has been spent since 1963.

Libya's Five-Year Development Plan (April 1963-March 1968) had an estimated development budget of $473 million. About 17 percent of this sum was designated for agriculture when the Plan was enacted in 1963. Agriculture ranked after public works, communications, and housing in size of appropriations.

Objectives of the Plan included increased incomes, the equalization of rural and urban incomes, a higher standard of living, and added employment opportunities for the people. The Plan also sought to improve agricultural production on land in cultivation, reclaim land for agriculture, diversify agricultural production to reduce the country's dependency upon imports, stabilize prices, insure sufficient supplies of consumer goods, and develop local industries to utilize more agricultural products.

Jebal Akhdar in Cyrenaica and the agricultural belt in Tripolitania are the main areas in which the Government has concentrated its land settlement efforts. The National Agricultural Settlement Authority (NASA) was created in July 1963 as an autonomous agency of the Libyan Government and has taken responsibility for all agricultural settlement schemes. NASA hopes to develop all farms which have reverted to Government control, including some of the land formerly owned by Italian farmers and other aliens; reclaim wasteland which has agricultural potential; encourage individuals to reclaim and develop their own lands; and promote cooperatives.

Farmers are assisted with seed procurement, animal husbandry, tractor plowing, stable construction, fencing, and marketing. To improve the marketing structure, the Government has constructed a cold storage plant and a vegetable oil plant in Tripoli, and price supports are applied to Libya's major crops. Imports of feeds, seed, and olive oil are subsidized by the Government.

There are 25 water development, conservation, and irrigation projects either under construction or being considered in Libya, but agricultural projects are mostly small and widely scattered, indicating that agricultural plans are lagging behind original goals. (Carolee Santmyer)

MALAGASY REPUBLIC (MADAGASCAR)

Malagasy Republic, the world's fourth largest island after Greenland, New Guinea, and Borneo, covers an area of 230,035 square miles or about that of California and Oregon combined. Over 90 percent of the 6.8 million population is engaged in subsistence

agriculture. Industrial activity is limited to processing agricultural products. In 1966, the gross domestic product was $650 million, $90 per capita. The agricultural sector accounted for approximately 55 percent of the GDP and about 85 percent of all exports.

Malagasy Republic is the world's leading producer of vanilla beans, providing over half of the world's supply.

Prices, Markets, and Foreign Trade

Generally, the Government does not engage in price support operations at the producer level, although at the national level it does conduct programs relating to price support. In 1966 the Government bore losses on sugar exports, and in 1967 it made payments to producers for destroying a portion of their vanilla bean crop. There is no Government subsidy on the use of commercial fertilizer.

Coffee, mostly Robusta, is the country's most valuable export. Under a coffee marketing system set up in 1959, the Government sets the price paid to the producer (about 100 Malgache francs a kilo or 18.4 cents a pound), varying the price according to the grade of coffee and producing area of the country. The coffee buyers as a group are obligated to buy all coffee offered, but they may act independently of each other. The exporters maintain their own warehouses, processing, and grading facilities, arrange their own financing, and draw upon or contribute to the coffee stabilization fund, depending upon the world market price for coffee exports. Basically, the same system of marketing is used for cotton, vanilla, cloves, and pepper, with some variations, particularly for vanilla, Malagasy Republic's second or third most valuable export.

In late 1966, a new export quota for vanilla was established under the vanilla marketing agreement signed by the Malagasy Republic, the Government of France on behalf of the Comores Islands and Reunion, and the U.S. Vanilla and Flavoring Extract Manufacturers Association. This agreement established a system of export quotas and prices with the aim of stabilizing world vanilla prices to avoid the previous wide fluctuations in price which had discouraged use of true vanilla. This agreement is particularly important from the standpoint of agricultural policy, as global inventories of vanilla in 1967 were very large.

In Malagasy Republic, green vanilla pods are purchased from producers by cooperatives and various other processors at prices set according to grade. Exporters of vanilla are paid a fixed commission rate established by the Government. The organizations involved in the vanilla industry are: The Groupement Interprofessional (composed of vanilla planters, processors, and exporters), Bureau du Commercialisation et Stabilization, and the Vanilla Stabilization Board.

Since France has discontinued buying sugar from the Malagasy Republic under preferred arrangements, an OCAM (Organisation Commune Africaine et Malgache--Joint Afro-Malagasy Organization) Sugar Committee has been established, with headquarters at Fort Lamy, Republic of Chad. The only exporting members at present are the Malagasy Republic and Congo (Brazzaville). Under the terms of the OCAM Committee agreement, a small tax, payable in hard currency to the Committee, is levied on sugar imports. The funds so collected are used to pay exporting member countries a "bonus" for a certain proportion of their exports which go to importing members of OCAM. The Malagasy Republic receives a larger bonus because of its distance from other OCAM members and because its sugar is refined to final form in bond in France, thus adding considerably to transport costs.

One of the more successful agricultural development and marketing organizations in the Malagasy Republic was established in

1961. It is known as SOMALAC (Societe Malgache Lac Alaotra--Malagasy Lake Alaotra Society) and its operations are confined to development of a part of the rice-growing area of the Lake Alaotra Basin north of Tananarive. SOMALAC develops the land with machinery, resettles families on family-sized economic units of 5 hectares, amortizes the land over a period of 15 years, and supplies credit to purchase agricultural supplies, such as ox-drawn equipment, improved seed, and fertilizer. It also furnishes technical guidance and information through its own extension workers (monitors). SOMALAC has a limitation of 12,000 hectares on its operations until a more widespread and better coordinated watershed development and erosion control program is put into operation to prevent further silting of Lake Alaotra and to stabilize the water level. By the end of 1967, farmers had settled over 5,000 hectares of riceland. Average yields varied from 3 to 3.5 tons of paddy rice per hectare, compared with 1.2 to 1.8 tons in areas outside the SOMALAC operations. Some farmers in the development produced 5.9 tons per hectare. SOMALAC's operations are financed largely by the Malagasy Government, the FED (Fonds Europeen de Developpement--European Development Fund), and private sources in Madagascar.

Most rice farmers require regular annual credit to support their operations. The Banque Nationale Malagache (Malagasy National Bank) was established primarily to finance rice production, and it serves the farmers needs through mobile banking units. A quasi-governmental cooperative and marketing organization (COMEMA) operates in a limited area near the port of Majunga for processing and exporting to France a luxury type of rice.

Generally, Malagasy customs duties are relatively low; import licensing and traditional trade and banking relations with France and the European Common Market countries are a greater impediment than customs duties to countries seeking a market in the Malagasy Republic. For example, live animals, meat, cereals, and flour have a duty of 5 percent; fruits and vegetables, 10 percent; dairy products, 5 to 10 percent. These duties are not levied on products from the European Common Market and associate members, however. In addition to the customs duties, imports generally are subject to a tax based on cost, plus insurance and freight value; this tax is applicable to products from all sources. Some products have specific import taxes, as follows:

Import taxes	Percent
Livestock	31
Butter	31
Fruits and vegetables	31
Rye, barley, oats, corn	31
Wheat	24
Meat, except poultry, and lard	18
Milk products	12-18
Wheat flour	12
Rice	2

In 1968, the preferred market for Maryland, flue-cured, and other tobacco exports from the Malagasy Republic to the French tobacco and match monopoly is scheduled to phase out. Programs have been in effect for several years to shift part of the production from Maryland type tobacco to flue-cured.

Agricultural Development and Productivity

Under the Plan Quinquennal (1964-68), the basic agricultural policy of the Malagasy Republic is (1) to expand and improve upon the effectiveness of primary agricultural facilities and organizations, (2) to supply more adequately the farmer's needs for fertilizer, farm supplies and equipment, credit, and agricultural extension programs, and (3) to increase the quantity and quality of selected agricultural products. The goals under the Plan are to increase the value of crop production 28 percent by 1968 and 62

percent by 1973, and the livestock slaughter value 19 percent by 1968 and 75 percent by 1973.

A complex system of separate Government organizations exists in the Malagasy Republic for agricultural development, research, agricultural extension, forestry, agricultural credit, conservation, and livestock production. In addition, there are quasi-governmental marketing and rural development organizations cooperating with the Ministry of Agriculture and the Ministry of Interior. Some overlapping of interests and jurisdiction results under this complex system.

Crop research is conducted at a modern center near Tananarive. Other research activities include a livestock breeding and veterinary center and regional and specialized commodity research stations, such as the one for vanilla.

Under the current agricultural education program, there are several schools offering 2-year courses in agriculture on the secondary level. Three of these schools are located on the grounds of regional agricultural experiment stations. The graduates of these courses are usually sent into rural areas as agricultural extension agents to disseminate research findings.

Since 1961, the faculty of agriculture of the University of Tananarive has offered a 5-year university course which obviates the sending of university-level agricultural students to France for study. The College Rural d'Ambatove also conducts a 3-year course in agriculture.

Agricultural Aid

France and the European Development Fund supply the major portion of the development and technical assistance funds of the Malagasy Republic. U.S. assistance since independence has been largely in the fields of agricultural education and extension, along with training in the operation of agricultural equipment and other machinery, and the maintenance of highways. Some short-term training has also been provided in agricultural extension, home economics, and other agricultural fields in the United States. From 1963 through 1965, technicians of the U.S. Agency for International Development taught agricultural extension courses at Ambatove. In late 1966, a team from the U.S. Department of Agriculture, under the AID program, made a survey of the potential for longer term assistance in the development of rice and cattle production.

Nationalist China (Taiwan) is furnishing technical advice and personnel to demonstrate improved rice production methods. (Robert C. Moncure)

MALAWI

The chief goal of Malawi's agricultural policy is to step up the domestic production of many of the agricultural products which it usually imports. There is also a systematic policy of increasing small-scale manufacturing and agricultural processing.

Malawi's Department of Agriculture, forming a part of the Ministry of Natural Resources, has three divisions: (1) Technical Services is organized on a regional basis to serve crop and livestock husbandry, farm planning, soil conservation, farm dam building, agricultural credit, and miscellaneous services for all farmers; (2) Research Services operates a network of experiment stations geared to the needs of individual regions and commodities; and (3) Extension

and Training Services supplies educational and extension services on a regional basis. Other activities include the operation of the first agricultural college at Bunda, as well as three training institutes with short courses for farmers.

Prices, Markets, and Foreign Trade

The Farmers Marketing Board is the statutory body charged with the marketing, packing, and handling of the commercial sales of a number of agricultural products. The major commodities handled by the Board are non-estate tobacco, cotton, corn, beans, and peanuts. The Board maintains minimum reserves of corn and a few other nonperishable food crops to meet normal commercial domestic needs until the new crop is available. It maintains and operates commodity price stabilization funds for cotton and tobacco; it distributes fertilizer, spraying equipment and pesticides, farm carts, tools, fencing material, and other farming requisites. It also provides scholarships for the study of agriculture or other subjects related to the Marketing Board's responsibilities.

The Farmers Marketing Board maintains storage and marketing facilities at a number of stations, in connection with its responsibilities for operation of 32 cotton markets and 42 tobacco markets. All tobacco (except Turkish) is sold at public auctions at Limbe, including flue-cured and other varieties grown in the Eastern Province of Zambia. A separate station at Mbawa handles Turkish tobacco which is sold by private agreement and not at auction.

Malawi's comprehensive agreement with the Republic of South Africa came into force in April 1967. This agreement recognizes the longstanding trade relations between the two countries and the continuing temporary migration of Malawians to South Africa to work under contract. Under the agreement, South Africa agrees to admit duty free a minimum of 500,000 pounds of Malawi tobacco, with the provision that the quantity may be adjusted upward upon mutual agreement. A list is maintained of specific agricultural items (as well as nonagricultural items) which are subject to special tariff concessions and to import licensing by both Governments for mutual protection of producers. Bulk rice and cotton from Malawi are among the products admitted by South Africa at the most-favored-nation rate. Tea is admitted duty free. Goods grown, produced, or manufactured in South Africa are admitted by Malawi subject to the second category of the three-column tariff system. The first column, and most preferential treatment, applies to the United Kingdom, the Channel Islands, and the Isle of Man; the second column applies to independent countries of the British Commonwealth, dependent territories and protectorates, and the Republic of South Africa and South-West Africa; the third column covers all other countries, including the United States.

Malawi has a trade agreement with the new nation of Botswana (formerly Bechuanaland) which admits most products from that country free of duty.

Agricultural Development and Productivity

The main targets of Malawi's Five-Year Development Plan (1965-69), which is funded at about $68.6 million, primarily from outside sources, are: (1) To increase the productivity of the country's farmland; (2) to increase the production of export crops; (3) to develop the nonagricultural potential of the country, particularly to expand the planted forests for production of woodpulp and fuel, and to increase the domestic supply of foodfish by systematically developing the fishing industry of Lake Nyasa, along with farm fishponds; and (4) to expand the scale of manufacturing and agricultural processing industries.

The major supplier of funds and staff under the Development Plan is the United

Kingdom, which also provides substantial supplemental funds and staff for the regular recurrent annual budgets.

The Development Plan gives particular emphasis to expanded and improved educational facilities.

Agricultural Aid

U.S. aid, although not large, has been directed toward agricultural education, extension training, and rural development planning. The first agricultural college and farmer training institutes in Malawi were financed and staffed under a land-grant agricultural college contract of the University of Massachusetts with the Government of Malawi. While primary emphasis has been given to education, training, and extension in Malawi, limited numbers of Malawian agricultural leaders, including workers in extension and cooperatives, have been sent to the United States for training courses. In cooperation with FAO, some assistance is being given by U.S. technicians in establishing systematic agricultural services. This includes inservice training for Malawians in statistics. Recently, the Government under this new service published the first complete population and related census of the nation. (Robert C. Moncure)

MALI

The principal objectives of Malian agricultural policy are to improve nutrition and food supplies by increasing the availability of subsistence grains in Bamako and other principal consuming areas, and to expand production of peanuts and cotton for export. Nearly 40 percent of the total development budget for 1966/67 was allocated for agricultural development.

To bring more of the local grain production into commercial channels, the Government has established a marketing system through which local grains are sold at established prices. However, the farmers have been slow to adjust to the system and have been dissatisfied with the established prices. Food shortages in the larger urban centers in recent years are believed to reflect the reluctance of farmers to sell rather than a reduction in volume produced.

Peanuts still constitute a major export item from Mali. However, shipments have been declining and only about 17,000 tons of unshelled peanuts were exported in 1966. Practically all the export shipments are to Sino-Soviet bloc countries under barter type arrangements. As a result, Mali's critical foreign exchange position has been increasingly aggravated.

Livestock production has remained about constant in recent years, with little or no improvement in the quality of slaughter animals and meat. Mali is an important source of slaughter cattle for neighboring countries. Approximately half of these cattle move on the hoof as unregistered exports, representing a substantial foreign exchange loss to the Government of Mali.

Mali and France have made an agreement under which the Malian franc would be progressively strengthened over a number of years. Such a move is designed to reduce the unregistered exports of cattle and attract more locally produced grain into Government commercialization channels. However, there is no single cure-all for Mali's food problems, and current efforts to increase production will be hampered by lack of incentives at the producer level, including the unavailability of consumer items. On May 5, 1967, the Mali franc was revalued from 246.853 francs per dollar to the new rate of 493.706 per dollar.

Prices, Markets, and Foreign Trade

Farmers receive a guaranteed price for peanuts. For the 1966/67 season, growers received 2.8 cents a pound for unshelled peanuts. The rural cooperatives are responsible for purchasing peanuts from the producers, while peanut exports are the exclusive responsibility of SOMIEX (Societe Malienne d'Importation et d'Exportation--Mali Society for Import and Export).

The only authorized purchasers of grains from the producers are the cooperatives and the mutual bonding association approved by the regional grain committees. For the 1966/67 season, Government-set purchase prices for corn and millet were 2.8 cents a pound. Grain purchases by authorized organizations become the property of the Office of Cereals, Fruits, and Vegetables. Grains cannot move from region to region within Mali without specific authority. Distribution of grain to deficit areas is the responsibility of the Government food procurement and distribution agency.

Mali is a member of the UDEAO (Union Douaniere des Etats de l'Afrique de l'Ouest--the Customs Union of the West African States), which also includes the Ivory Coast, Upper Volta, Niger, Dahomey, Senegal, and Mauritania. As an associate member of the European Economic Community, preferential tariffs and import levies are granted by the EEC and franc zone countries under terms of the Yaounde Convention Agreement.

Mali utilizes a licensing system for both imports and exports. SOMIEX, the state trading association, controls the importation of sugar, cement, flour, salt, matches, cigarettes, oil, soap, and tea as well as the export of peanuts.

Mali is under substantial commitments to the bloc countries under various bilateral and barter arrangements. In recent years, increasing quantities of Mali's agricultural production for export have gone to Sino-Soviet Bloc countries.

Agricultural Development and Productivity

Mali's first 5-year development plan ended in 1966. A second plan again sets priorities on agricultural production.

One of the more significant aspects of agricultural policy in Mali is the Office du Niger (the Niger Office), the outstanding irrigation and resettlement project of the former Federation of French West Africa. The Office du Niger, located on the "delta" of the Niger River, was set up by the Metropolitan French Government in 1932 to produce exportable surpluses of cotton and enough rice to feed the African population. Actual accomplishments were not up to original expectations, and emphasis later shifted from cotton to rice. Many Africans were attracted to this formerly desert area from overpopulated areas of French West Africa. Originally, land of the Office du Niger was farmed mostly with hand labor, but since World War II, farming has become highly mechanized.

Except for the Office du Niger, farms in Mali are still largely village types. For all practical purposes, land is state owned, and villagers are allocated farming plots.

A number of small rural schools have been set up throughout Mali to teach improved production practices by demonstration. These schools have reportedly had varying degrees of success.

Agricultural Aid

As in most other former French countries, substantial French and EEC assistance has been provided to improve and diversify agricultural production in Mali. In fact, Mali is probably more dependent on such aid than most other former French countries. Management problems of the local organizations

administering the outside aid have limited the effectiveness of such aid, however. U.S. assistance includes livestock disease control and food supply programs under Titles I and II of Public Law 480. The Mainland Chinese are also engaged in agricultural and other technical assistance activities in Mali. These include sugarcane experiments in the Office du Niger and the building of a cigarette factory in Bamako. In time, this factory is expected to utilize locally grown leaf tobacco. (Snider W. Skinner)

MAURITANIA

Mauritanian agricultural policy is directed primarily toward more economic utilization of livestock, principally cattle, which number over 2 million. Slaughter and processing facilities are either under construction or planned in four locations in Mauritania. There are, however, a number of serious obstacles to the development of a commercial livestock industry. These include the reluctance of owners to part with their livestock, which they prefer to money, lack of marketing and processing facilities, and inadequate transport for both livestock and meat.

The Government of Mauritania also hopes for larger harvests of food grains, particularly millet, and currently is offering steel plows to farmers at subsidized prices to stimulate production. At the same time, the Government is encouraging the use of draft animals.

An agricultural extension monitor system is being sponsored by the United Nations. This system will eventually reach 200,000 producers.

During the period 1959-65, French aid to Mauritania totaled $21.5 million; EEC aid, $25.3 million, and U.S. aid, $2.8 million. Some aid also came from Spain, Germany, and Algeria. Most of the aid expenditures have been in fields other than agriculture.

About $3 million of the EEC assistance was used to improve and diversify agricultural production. Projects include the building of wells and dams and limited experiments in growing cotton, vegetables, fruit trees, and pineapples. (Snider W. Skinner)

MOROCCO

Morocco is still adjusting to its independence and the transition from French rule. The Government is proceeding to build a balanced economy while reducing its traditional dependence upon France for trade, investment, and assistance.

Prices, Markets, and Foreign Trade

Morocco has trade agreements with some 30 countries. These constitute most of the countries with which it has any significant trade. Special preferential trade quotas are negotiated annually with France. Although Morocco has lost much of its preferential treatment in the French market, some products still enter France duty free. They include wine, grapejuice, potatoes, vegetables, and citrus fruit. Trade and payment agreements are in force with most of the Communist bloc countries.

Morocco has applied for associate membership in the European Common Market.

The necessity for conserving foreign exchange has caused the Moroccan Government to control imports through strict licensing and to obtain required imports where possible through bilateral clearing arrangements or bilateral economic assistance, or on credit terms.

Morocco does not subsidize its agricultural exports, although it has initiated promotional efforts for such products as vegetables, fruits, cotton, and fertilizers. Exports of citrus fruits, vegetables, fish products, handicrafts, and raw cotton are Government controlled. Tobacco trade is the monopoly of the Regie des Tobac. Imports and domestic distribution of tea, sugar, wheat, wheat flour, and grains, other than Public Law 480, Title III products destined for welfare distribution, are directed by the National Government. The Government also controls phosphate fertilizer activities.

Morocco enforces a schedule of import duties of varying levels for agricultural products, but the licensing requirement provides a greater control over imports than do customs taxes. The import duties are complicated and include several forms of taxation on entry, such as direct ad valorem charges, special taxes, transaction taxes, stamp taxes, and port handling taxes.

The Moroccan Government exercises varying degrees of control over food and agricultural products as they proceed from farmer or importer to consumer. For example, the price of bread wheat, wheat flour, and semolina from importer or producer to retailer is controlled. Guaranteed floor prices are also fixed for durum wheat and barley, but other grains and pulses are traded freely. To influence market prices, the Government attempts to regulate the supply of grains by limiting imports or exports. Other products covered by fairly strict price controls are rice, raw tobacco and tobacco products, raw cotton, vegetable oils, sugar, and sugarbeets. An attempt is made by municipal governments to control profit margins and markups in city and village markets.

Agricultural Development and Productivity

The Moroccan Government is expected to place more emphasis on agricultural reorganization and development under its new 5-year plan (1967-72) than under past plans. The Ministry of Agriculture has relinquished much of its central power to regional offices and to Provincial Governors functioning under the Ministry of Interior and will be primarily a servicing and advisory organization.

Government policy for agricultural development is based upon the following goals:

(1) More efficient use of water resources and continued efforts to bring more land under irrigation;

(2) Increased crop production through use of improved seed and fertilizer and more readily available farm implements and technical assistance;

(3) The establishment of industrial units to process agricultural products;

(4) Training of agriculturalists and technical personnel;

(5) Assistance in organizing cooperatives to hasten the modernization of agriculture and to make property available as rapidly as possible to those without sufficient land.

Expropriation of land in Morocco has not been extensive. In 1965, the Government took over about 225,000 hectares of land held by foreigners. Foreign-held land does not exceed 400,000 hectares and is found mostly in fruit and vegetable production along the coast. Although legislation provides for the eventual distribution of the retaken land to qualified Moroccans, this phase of land reform has

proceeded slowly. The Government operates the bulk of this land under the Ministry of Agriculture and the Provincial Governors.

Considerable attention has been directed toward irrigation improvements in recent years, both as large- and small-scale developments. About 400,000 hectares are under irrigation in Morocco, and some experts believe that eventually 1 million to 1.5 million hectares can be developed for irrigated crops. However, the heavy financial and technical requirements for irrigation development are considered to have reduced resources available for the development and modernization of the largely subsistence dryland sector. While relatively good progress has been made in sugarbeet, cotton, fruit, and vegetable production, the deficits in cereal and livestock production remain.

Morocco has provided the legislative structure for agricultural cooperative organizations and encourages this movement, especially for the dissemination of agricultural credit and machinery. The cooperatives also serve as a channel for extension and educational activities. The major source of agricultural credit is the CNCA (Caisse National de Credit Agricole--National Agricultural Credit Fund). Agricultural credit is relatively available and reasonably effective in Morocco.

An efficient system of agricultural research and a number of experiment stations, most of which have been in existence since the French period, are active in Morocco. The major problem is staffing these stations and providing the extension or educational outlets for transforming research into actual practice. The 1965-67 3-year plan set goals for strengthening this system.

Because of the lack of farm machinery, virtually all of the mechanized land preparation and harvesting operations are limited to the Government-managed farms, the more progressive private farms, and a few cooperatives. Large numbers of tractors are inoperative because they lack parts or proper maintenance. However, there is a center for training in agricultural mechanics in Rabat, and the Government attempts to supply some mechanized operations at reasonable cost to small farmers.

Agricultural Aid

France and the United States are the largest contributors among foreign nations assisting Morocco in the field of agriculture, although other nations are assisting with credits. U.S. agricultural assistance includes sales and grants under Public Law 480 as well as technical assistance projects carried on by the Agency for International Development. France supplies technicians and scholarships, finances research and extension activities, and assists with long-range agricultural developments. Multilateral agricultural assistance is also provided by the International Bank for Reconstruction and Development, World Food Program, FAO, and the U.N. Special Fund. (Carolee Santmyer)

MOZAMBIQUE

Mozambique is an Overseas Province of Portugal. On Mozambique's behalf, Portugal has agreements with Rhodesia, Malawi, the United Kingdom for Swaziland, and the Republic of South Africa (under the revised Mozambique Convention). These agreements cover trade arrangements and, more importantly, the large agricultural and nonagricultural transit trade moving through Mozambique's two principal ports of Lourenco Marques and Beira. These services and facilities are an important source of income and employment for Mozambique. For example, refrigeration facilities in Lourenco

Marques are used for shipments of citrus fruit from Swaziland, South Africa, and Rhodesia as well as domestic exports. Beira provides the port for most of Malawi's tobacco, tea, and other exports, and also for a major portion of Zambia's copper, confectionery peanuts, and some of its tobacco exports.

Prices, Markets, and Foreign Trade

Mozambique's tariff system is a complex one, involving specific rates based on weight on some items and ad valorem duties on others. The ad valorem rates range from free to about 42 percent. Duties on raw materials average about 6 percent, but wheat imports are duty free although subject to import licensing by the Cereals Institute.

The long-term policy is to eliminate tariff restrictions between Mozambique and other Overseas Provinces of Portugal. Currently, there are export duties on some commodities, with a reduction of 20 percent on some exports to metropolitan Portugal, adjacent islands, and other Overseas Provinces. These reductions apply particularly to cotton, sugar, sisal, tea, rice, tobacco, and oilseeds. Similarly, Mozambique imports from the same area a few agricultural items which benefit from a 20-percent reduction in duty. These are primarily wines and brandy, processed milk, butter, margarine, and tomato puree. Several food and related imports from non-Portuguese sources are admitted duty free, including processed and canned meat, canned vegetables, and coffee. There is a wide range of heavy internal excise taxes, but few of them apply to agricultural items other than tobacco and sugar.

Agricultural Development and Productivity

While 80 percent of Mozambique's visible exports are agricultural, its regular agricultural budget is small in proportion to agriculture's needs and importance. However, some budget items affecting agriculture, such as roads and highways, are included in other parts of the provincial budget and the 6-year development plan for 1968-73. Private investment (including non-Portuguese capital) is providing funds for large-scale plantations and mills, mechanized shelling of cashews, and other agricultural development projects. A huge multipurpose development complex (Cahora Bassa) on the Zambezi River is planned with outside capital. This project proposes to increase production of rice, cotton, and sugar through extensive irrigation.

The Government has authorized the construction of the Maragra sugar refinery in southern Mozambique, the first refinery in Portugal's Overseas Provinces to manufacture fully refined sugar. The 1968-73 plan provides for expansion of Mozambique's oilseed crops (peanuts, copra, and mafurra), primarily to meet the increasing demands of the oil expression industry.

Shelled cashew nuts may become Mozambique's most valuable export by 1970 because of the rapid construction of mechanical shelling plants.

Flour milling is expanding. Two new mills began operation at Beira and Lourenco Marques in late 1967. Most of the flour is milled from imported wheat.

Mozambique's best known agricultural development project is the Colonato do Limpopo, a multiracial agricultural settlement scheme along the Limpopo River. This project includes about 75,000 acres of irrigated land, plus nonirrigated lands used for grazing. More than 1,500 families are in residence. The need for governmental support appears to be diminishing.

While no significant changes in agricultural policy have been introduced in recent years, there have been some organizational changes which affect agricultural policy.

Mozambique has a highly complex system of organizations dealing with agriculture:

A Secretaria Provincial de Terras e Povoamento (Provincial Secretary of Land and People) is concerned with agricultural policy generally, and settlement schemes in particular;

O Servicos de Agricultura e Florestas (Agriculture and Forest Service) handles agricultural extension and publications;

Instituto de Investigacao Agronomica (Institute of Agronomic Research) carries out basic agronomic research;

O Servicos de Veterinaria (Veterinary Service) is responsible for veterinary assistance, livestock improvement, livestock marketing and price policy, and is the residual buyer of all cattle unsold at public auctions;

Instituto de Algodao (Cotton Institute) promotes cotton production, guarantees internal marketing of cotton, and provides technical, extension, and financial assistance to growers. It is also promoting the development of cooperative marketing for cotton;

Instituto dos Cerais (Cereals Institute) supervises the internal marketing of wheat, corn, rice, and peanuts, and provides technical and financial assistance. It sets prices to growers, and is the sole importer of wheat, tenders for which are made every 3 months;

Missao de Inquerito Agricola (Mission of Agricultural Inquiry) is responsible for crop and livestock statistics and the agricultural census.

(Robert C. Moncure)

NIGER

About 80 percent of Niger's gross national product comes from crop and livestock production. Crops account for about 50 percent and livestock about 30 percent. In 1965, peanuts and peanut products, cattle, sheep, goats, hides and skins, and other agricultural products comprised 95 percent of all exports (valued at $25.5 million).

Since much of northern Niger is in the Sahara, the lack of rainfall is the major deterrent to agricultural expansion. Several river drainage and irrigation projects are in the early stages of development or planning. The two largest projects are in the Maggia Valley (21,000 acres) and the Goulbi de Maradi (15,000 acres).

Niger was one of eight territories of the former French West Africa, and France is still Niger's principal trading partner. France bought most of Niger's 1965 peanut crop at a price 10 percent above the world market. This support was scheduled to be withdrawn under terms of Niger's Associate Membership in the European Economic Community, and for the 1967/68 season France stopped purchasing Niger's peanuts at a special price. This means Niger will now sell peanuts on the open market.

Peanut purchases within Niger and exports are handled by a semipublic corporation, the Nigerien Company for Peanut Marketing. Ownership of the company is divided equally between the Government and private buyers. Niger has lowered the producer price for the 1967/68 crop; first-grade peanuts bring 3.6 cents a pound.

In 1966, Niger received 3,000 tons of sorghum under Title II, Public Law 480, to cope with a food shortage arising from a poor

crop of millet (the nation's staple food) in 1965. Niger is usually self-sufficient in food production, often with a slight excess for export. (Snider W. Skinner)

NIGERIA

Nigeria is one of Africa's major producers and exporters of farm products. Cocoa, peanuts, palm kernels, palm oil, cotton, and rubber are the chief commercial crops.

The country's agriculture is receiving substantial technical assistance from several countries, including the United States. It is probably too early to expect significant improvement in agricultural productivity from this technical assistance. Since early 1966, Nigeria has suffered severe political instability, including the secession of Eastern Nigeria 1/, which gave itself the title of "Republic of Biafra," and the ensuing civil war which continues in mid-1968. The following description of Nigerian agricultural policies must therefore be viewed in the light of existing political and economic uncertainties.

Prices, Markets, and Foreign Trade

The marketing boards set prices paid to farmers for primary agricultural products like peanuts (excluding peanut oil and cake), cocoa, palm kernels, palm oil, cottonseed, soybeans, sesameseed, castorseed, coffee, ginger, cotton lint, and copra. An overall Nigerian price is fixed for each of these products by the appropriate board, but the price paid to producers varies with the locality and reflects the cost of transportation to ports. However, with the 1967/68 cocoa crop, the Western State Marketing Board began to pay the cost of transporting cocoa from the point of production to the port of export. A similar policy for palm kernels and palm oil was adopted by this Board, beginning with the 1968 marketing year. Coffee prices are set only by the Northern Regional Marketing Board.

The intention of the marketing boards in fixing producer prices is to reduce price fluctuations throughout the country and to help cushion the producer against fluctuating world market prices. In addition, the marketing boards constitute a major source of Government revenue. Part of their earnings have been channeled into aiding educational and research programs and reportedly into supporting Nigeria's 6-year development plan (1962-68).

During 1965, the Government of the Western Region discontinued subsidies to farmers for chemicals and equipment for cocoa spraying. This contributed to the drop in cocoa production during the 1965/66 season. In the Eastern Region, although the subsidy on cocoa planting has now ceased, the subsidy on the planting of palm trees continues. Spraying machines and materials are still made available to growers at subsidized prices in this region. In the Northern Region, farmers receive free cottonseed for planting and may purchase fertilizers at subsidized prices.

1/ Under terms of a decree promulgated by the Federal Government of Nigeria, the four regions of Nigeria were replaced by 12 States. This decree became effective April 1, 1968. Northern Nigeria was divided into six new States--North-Eastern, Kano, North-Central, Benue-Plateau, North-Western, and Kwara; Western Nigeria was divided into two States--Western and Lagos; the Mid-Western Region became the Mid-Western State; Eastern Nigeria became, under the decree, three states--Central-Eastern, South-Eastern, and Rivers.

Most agricultural exports move through the Nigerian Produce Marketing Company (NPMC), which is owned by the regional marketing boards. NPMC, with its headquarters at Lagos, Nigeria, provides facilities for the effective export of all marketing board produce bought in the four regions of Nigeria. In other words, the NPMC provides the combined essential machinery of Nigeria's overseas produce trade by selling, shipping, and making financial arrangements. The NPMC maintains an open-door trade policy and is subject to the satisfaction of normal commercial inquiries; business is transacted with any buyer in any part of the world.

Internal trade is not coordinated or regulated by the NPMC or any other agency; consequently, the maintenance of prices for interregional trade is not undertaken.

Tariffs are established from time to time. Customs tariffs are subject to revision when necessary. In 1965, when tariffs were revised, the revision was aimed mainly at protecting local industries operating under the Income Tax Act of 1958 (Pioneer Industry Act), and at increasing duties on some items considered luxuries. On March 27, 1966, there was a revision of duties on certain import goods, including some agricultural products.

In a Government notice dated June 7, 1966, importation of wheat flour was removed from open general license. In order to lower the cost of producing cigarettes locally, duty on unmanufactured tobacco imported by licensed manufacturers was reduced from $2.80 a pound to $2.14. At the same time, the 33.3-percent duty on agricultural tractors and the 5-percent duty on parts for agricultural equipment were removed. The importation of agricultural products from most countries of the world into Nigeria is under open general license, except imports from South Africa, South-West Africa, Rhodesia, and Portugal. During 1965, restrictions were placed on goods (including agricultural products) from Japan. This was done to offset the imbalance in trade between Japan and Nigeria. This ban has been lifted, primarily because of the $28 million loan made by Japan to Nigeria in October 1966 to help in Nigeria's economic development. The Government of Nigeria does not support import trade monopolies. Imports are usually handled by private firms. Occasionally, however, the Government of Nigeria and the marketing boards import special items or products for their use.

The Government of Nigeria does not pay export subsidies as such on agricultural products. Instead, it levies duties and taxes on a large number of exportable commodities as a means of earning revenue.

Nigeria is a member of the General Agreement on Tariffs and Trade (GATT). The country maintains bilateral trade agreements with non-GATT nations, including Poland, Czechoslovakia, Soviet Union, and Hungary. Nigeria, a member of the sterling bloc, is also now an associate member of the European Economic Community. The agreement (known as the Lagos Convention) with the EEC countries was signed on July 16, 1966. The implementation of the agreement is subject to ratification by the Parliaments of each member state, and the agreement will be valid until May 31, 1969. If the agreement comes into force, Nigerian exports will generally enjoy the same tariff privileges which member states of the EEC apply among themselves. However, in the case of Nigeria's main export products, like cocoa, peanuts, palm produce, and plywood, tariffs will have to be paid on any excess above the export average for the 1962-64 period.

Agricultural Development and Productivity

The 6-year development plan (1962-68) prepared by the former Federal and Regional Governments has been vitiated by the civil war.

There are very few large-scale farming operations in Nigeria. The majority of farmers depend on subsistence agriculture. According to the Farm Survey, 1963/64, published by the Federal Office of Statistics in Lagos, 68 percent of Nigerian farmers cultivate less than 3 acres of land per farmer.

The land tenure system in Nigeria cannot be described as favorable to large-scale farming, especially by foreign investors interested in agriculture. The land is vested in the people under Government supervision, and no land can be sold or leased to foreign nationals (except in Lagos, Federal Capital Territory, the Colony Province, and recently in the Northern Region of Nigeria) without the approval and consent of the Government concerned. Such approvals, which are usually under a leasehold agreement for a maximum period of 99 years, are subjected to strict scrutiny and control by all the Governments of the Federation. The Government of Northern Nigeria has recently relaxed the policy of land tenure to permit foreign investors who wish to obtain lands for agricultural purposes to negotiate long-term leases through the Northern Nigeria Development Corporation (a regional government investment agency).

The various Governments of the Federation, in collaboration with foreign agencies, are training young farmers in all spheres of agriculture, including extension services. Aside from the various farm institutes in the country, there are other training programs in farm machinery organized by non-Nigerian firms.

Agricultural Aid

Nigerian agriculture receives a large amount of technical assistance from several nations. The United States, the United Kingdom, West Germany, and Canada are main contributors. The agricultural program of the U.S. Agency for International Development in Nigeria, in terms of personnel and technical assistance, is one of the largest in the world. Also, an increasing number of U.S. Peace Corps volunteers in Nigeria are working in agriculture.

Typical of the AID technical assistance program in agriculture are the following training activities completed in 1966 in Nigeria:

Eastern Region: 183 persons graduated from a 1-year course as Agricultural Assistants;
33 Assistant Agricultural Superintendents completed a 2-year course;
15 Farm Settlement Officers were provided inservice training.

Western Region: 280 persons completed a farm institute training course and will become farmers in one of the farm settlements;
167 graduated as Agricultural Assistants (2-year course);
56 graduated as Agricultural Superintendents (2-year course);
34 graduated as Animal Health Assistants (2-year course).

Northern Region: 166 graduated as Agricultural Assistants (2-year course);
Annual intake of 460 trainees into the 22 farm institutes, with 245 completing the 1-year course in 1966.
224 completed a 1-year course at the Farm Training Center as Agricultural Instructors (extension workers).

From a total of 315 future agricultural leaders studying abroad, 51 have graduated with B.S. degrees and returned to Nigeria; two of the five completing B.S. and M.S. degrees have returned to Nigeria; and 29 with B.S. degrees are pursuing M.S. degrees in the United States under other AID projects. (Snider W. Skinner)

Senegalese agricultural policy emphasizes increased efficiency and improvement in the production of peanuts, the nation's chief export crop. At the same time, diversification in agricultural production is being stressed in an effort to reduce the traditional heavy dependence on peanuts for export and to reduce rising food import requirements by producing more grains, livestock, meat, and milk.

Roughly 80 percent of the active Senegalese population is engaged in agriculture, with three-fourths of the monetary earnings of the agricultural sector coming from peanuts. Peanuts and peanut products make up practically all export trade in agricultural commodities and constitute a substantial part of total exports each year. To provide more balance, cotton, sugarcane, vegetables, and fruits are being developed as additional money crops and possible export crops. In past years, farmers have tended to neglect the traditional subsistence food grains while devoting more attention to peanuts. As a result, Senegal has imported increasing quantities of grain to offset the widening deficit between domestic requirements and local production.

Agricultural development is receiving increased official attention with reference to overall development and considerable sums of French and European Economic Community aid are being spent in Senegal for production improvements and agricultural diversification.

Prices, Markets, and Foreign Trade

OCAS (Office Commercialisation Agricole du Senegal--Agricultural Marketing Office of Senegal) is the agency responsible for the commercialization of the local peanut crop, including the purchase of peanuts from producers at guaranteed prices. The price to producers for the 1967/68 crop varied from 3.1 to 3.4 cents a pound (unshelled), depending upon producing districts. Prices were cut 15 percent for 1967/68.

The OCAS is also responsible for marketing local grains and for distributing imports. In recent years, distribution of subsistence grains to peanut producers to tide them over the annual "soudure" (hungry period) has been made at subsidized prices. The amount of this subsidy, however, was reduced during the second half of 1966 with an increase in retail prices for rice and other subsistence grains.

Increasing quantities of peanuts in recent years have been marketed through cooperatives at the producer level. For example, 78 percent of the 1965/66 crop was purchased by OCAS through cooperatives; the remaining 22 percent was purchased through private traders. In 1964/65, the proportions were 67 and 33 percent, respectively.

Tariffs and other controls have oriented Senegal's trade toward France. Senegal levies two types of tariffs on imports. A fiscal duty is collected on all imports, regardless of origin, primarily to obtain revenue. A customs duty, ranging from 5 to 30 percent, is collected on imports from outside the franc zone. This duty is reduced 30 percent for imports from EEC countries and is not collected at all on imports from other members of the UDEAO (Mauritania, Ivory Coast, Dahomey, Niger, Upper Volta, and Mali). (UDEAO is Union Douaniere des Etats de l'Afrique de l'Ouest--West African Customs Union). Two rather heavy customs surtaxes (a "standard" tax and a "turnover" tax) and a small statistical tax are collected on most imports, regardless of origin.

Nontariff obstacles, such as quotas, licenses, and currency restrictions, have in

the past been more of a barrier to increasing trade from non-franc zone countries than have tariffs.

Under a longstanding bilateral agreement between France and Senegal, France has purchased the bulk of the Senegalese peanut crop each year, both as unrefined peanut oil and shelled peanuts. The price paid by France has been above that prevailing on international markets. Effective with the 1964/65 season, France began a gradual reduction in the subsidies; however, to ease the transition period, the EEC Assistance Fund has agreed to make up the difference between the declining French subsidy and the former level through 1968. Over $35 million is to be spent by the EEC to meet the cost of this subsidy and for improvements in peanut production. The amount of the annual peanut crop which the EEC subsidizes is limited by the amount of funds set aside for this purpose, about $4 million annually for the period 1964-68. The objective is for Senegalese peanuts to be competitive on world markets at the expiration of the Yaounde Agreement in 1969.

Under the Franco-Senegalese agreement, Senegal agrees to import minimum quantities of such products as sugar, wheat, and wines from France.

Senegal has no export subsidies or other aids to exports.

In addition to its association with the EEC, Senegal is a member of the UDEAO, which includes most of the former French West Africa territories.

Agricultural Development and Productivity

The objectives of Senegal's second 4-year plan include the increased production of peanuts, grains, cotton, sugarcane, bananas, livestock, meat, milk, and poultry. Yields per hectare are also expected to improve as a result of the increased use of fertilizers called for under the plan.

Measures to improve farm efficiency in Senegal include the setting up of a relatively elaborate system under SATEC (Societe d'Aide Technique et Cooperative--Society for Technical and Cooperative Assistance). SATEC is financed by the FED (Fonds Europeen de Developpement--European Development Fund). Other measures include the increased use of fertilizers and insecticides and the start of programs to expand the use of hoes and plows in peanut production.

Senegalese farms are still largely village type. About half the total acreage under crops in Senegal is planted to peanuts, with most of the remainder in subsistence grain crops.

Social measures include continued efforts to encourage settlement of migratory and nomadic tribesmen, and the expansion of an agricultural monitor system designed to provide extension services to improve the living standards of the farmers.

Agricultural Aid

Senegal is receiving over $45 million from the EEC during the transition period for use in peanut price subsidization, production improvements, and agricultural diversification. Since 1959, the FAC (Fonds d'Aide et de Cooperation--French Assistance Fund) has spent a total of $12 million for development of production and $4 million on infrastructure. A sizable part of these expenditures has been in the agricultural sector. Other foreign assistance includes a small team of Nationalist Chinese technicians who are experimenting with rice production, and an Israeli expert who is exploring methods of improving honey production in certain areas of Senegal.

U.S. aid consists largely of Public Law 480 food shipments under Titles I, II, and III.

A significant aid program is the Casamance Agricultural Project, sponsored by the Agency for International Development and carried out by the U.S. Department of Agriculture. The project was outlined to demonstrate techniques for improving production of rice and other food crops, such as sorghum. (Snider W. Skinner)

SIERRA LEONE

The agricultural policy of Sierra Leone is directed toward increasing domestic production of food to meet local consumption requirements, thus reducing exchange expenditures for food items which now total around $15 million annually. In connection with this objective, the Government Rice Corporation was established in 1965. The Corporation aims to coordinate rice production efforts and eventually expects to distribute all locally produced and imported rice. Livestock and poultry feed production is also high on the priority list, as local availabilities of feed would permit more rapid development of the emerging poultry and livestock industries in Sierra Leone.

Progress thus far toward attainment of these goals has been slow. The Government Rice Corporation still markets only a fraction of the total crop. Substantial increases in the quantities of rice handled by the Corporation will enable it to fulfill its basic objective of making rice available at stable and reasonable prices to all consumers.

The Government of Sierra Leone hopes to step up exports of such items as oil palm products, coffee, and cocoa by encouraging larger plantings.

Prices, Markets, and Foreign Trade

The Sierra Leone Produce Marketing Board established the following producer prices in June 1967:

	Cents per pound
Palm kernels	2.9
Cocoa	12.5
Coffee, robusta	14.0
Piassava (palm fiber), Grade I	5.2
Oil palm fruit, loose	0.9

Lower prices are set for inferior grades of cocoa and piassava. The Board is responsible for the marketing of the farm products for which it establishes producer prices.

Efforts by the Government of Sierra Leone to expand oil palm production include the distribution of free seedlings, rodent protection for plantings, and the payment of $5.60 an acre annually until the trees come into production. Production practices are recommended by the Sierra Leone Produce Marketing Board, and agents inspect for compliance.

In 1965, the Commonwealth tariff preference was abolished and a nondiscriminatory tariff system was adopted. Import licenses are required.

Sierra Leone is a member of the (British) Commonwealth of Nations and the United Kingdom continues to be its major trading partner.

Agricultural Development and Productivity

In 1964, Sierra Leone adopted a somewhat general agricultural development plan which is still in effect.

The major objective of the Produce Marketing Board is to improve farming efficiency by providing technical assistance and, in some cases, actual equipment. At the same time, the Government Rice Corporation hopes to provide equipment on a custom basis to enable rice farmers to move into the higher producing swamp areas.

Agricultural Aid

The Njala Agricultural College in Sierra Leone opened in 1964 and was assisted by the U.S. Agency for International Development through a contract with the University of Illinois. At Kenema, a Government rural development institute was also assisted by USAID through a contract with Hampton Institute, which provided vocational agricultural training to the young people of the area.

The United States has also provided food, tobacco, and textiles under Public Law 480 agreements. (Snider W. Skinner)

REPUBLIC OF SOUTH AFRICA

Agricultural policy in the Republic of South Africa is coordinated at the Cabinet level by the Minister of the Department of Agricultural Economics and Marketing, the Minister of Agricultural Credit and Land Tenure, the Minister of the Department of Agricultural Technical Services and Water Affairs, and the Minister of the Department of Forestry. In addition, the Division of Bantu Agriculture of the separate Ministry of Bantu Administration and Development devotes itself specifically to agricultural policy, operations, and development in the native African reserves or homelands. Four university faculties of agriculture and five agricultural colleges for persons of European descent are under the direction of the Department of Agricultural Technical Services. Other agricultural and technical schools and colleges serve the African, Indian, and Colored populations.

Prices, Markets, and Foreign Trade

Commodity boards and agricultural cooperatives play dominant roles in the production and marketing of agricultural products in South Africa. However, except for sugar, the farmer has a large measure of choice in the quantity and types of crops he produces.

There are 23 quasi-public commodity and supervisory boards. About 88 percent of the total value of commercial agricultural production is under the supervision of the various commodity boards. Of these boards, 21 operate under the Marketing Act of 1937 and subsequent amendments. The Wool and Sugar Boards operate under separate and earlier legislation.

About two-thirds of agricultural production by value is marketed through cooperatives (as agents of the boards, where applicable), with some farmers being members of more than one cooperative. Under the Cooperative Societies Act, the marketing of an agricultural product through a cooperative can be made obligatory, provided 75 percent of all producers (white, Indian, and African) in a specified area request it.

Considerable quantities of deciduous fruit, all pineapples, fresh vegetables, cotton, rice, karakul skins, wine grapes, hay (including alfalfa), and some miscellaneous subtropical fruits and nuts are at present marketed outside the commodity board system, even though a substantial portion are marketed through cooperatives.

Although there are exceptions, the commodity boards may be divided into four categories as follows:

(1) One-channel annual guaranteed price schemes under which all producers may sell only to the board (or their agents). Producer prices are set by grade and type. Corn, wheat, barley, oats, rye, and manufactured milk come under this system.

(2) One-channel pool schemes under which the producers may sell only to the boards or their agents, which pay an advance from the sale of the products and make a final deferred payment after all deliveries of the pool have been disposed of. Producers receive whatever price has been realized by the board, less operating costs and any contribution to stabilization funds. Leaf tobacco, deciduous fruit, citrus fruit (in controlled areas), dried fruit, bananas, oilseeds, rooibos tea, lucerne (alfalfa) seed, and fresh milk and cream (in specified control areas only) come under this scheme. However, leaf tobacco and fresh milk and cream operate under a modification of the pool scheme.

(3) Surplus disposal schemes under which the producers dispose of their products in the open market, but the boards apply measures to support the market price when necessary. Surpluses are normally exported, generally through private trade channels under the supervision of the board concerned. Any losses incurred are met from stabilization funds of the respective boards. Meat (controlled areas only), white potatoes, dry beans, and kaffir corn come under this scheme.

(4) Supervisory schemes under which sales are prohibited except under written contract in accordance with specified quality at standard grades. The boards may recommend to the Department of Agricultural Economics and Marketing suggested minimum prices for such sales. The Canning Peach and Apricot Board operates in this manner. The Mohair Board operates as a variation of this scheme in that it may limit the sale of mohair to public auctions in certain centers and for specified grades, but its overall operation is similar to that of the Wool Board.

The Wool Board concerns itself primarily with promotion of wool production in cooperation with the Ministry of Agricultural Technical Services. In addition, it establishes grades and represents South Africa on the Board of the International Wool Secretariat. The Board maintains a reserve or floor price for wool, but this price has rarely been used.

The Sugar Board is often not considered an agricultural board because it deals with a manufactured or processed product. The Sugar Board allocates and controls both annual and long-term cane milling quotas. In cooperation with the Department of Commerce and Industry, it also fixes the domestic selling price of sugar. Sugar is the only agricultural commodity of South Africa for which there are production limitations. The Sugar Board is composed primarily of representatives of the growers (white, Indian, and African) and millers. The Board operates a sugar terminal in Durban with a capacity of 200,000 short tons, supports an advisory staff on irrigation, and since 1927 has maintained an experiment station. A bulk discount price on sugar used by fruit canneries is fixed annually. In 1967, the canners paid $98 per short ton for sugar delivered to ocean ports from Durban, instead of the full price of $171.27. The cannery pays the transportation costs from the port to the cannery.

A Perishable Products Board negotiates ocean shipping rates for perishable commodities and coordinates the allocation of refrigerated space on ocean shipping.

The National Agricultural Marketing Council, in cooperation with the Department of Agricultural Economics and Marketing and the various commodity boards, acts as the coordinating body in marketing. The Council suggests additional marketing studies on

specific problems and commodities, including recommendations for establishing additional commodity boards. In 1966, a unified Department of Agricultural Credit and Land Tenure was created to consolidate and coordinate policy on Government agricultural credit. Government credit is intended primarily for deserving farmers who are temporarily unable to secure credit from regular commercial financial institutions because of drought and other economic setbacks.

An Agricultural Advisory Board confines itself to broad principles and advises the Ministers on matters of general policy.

South Africa has a three-column customs tariff; that is, General, Most Favoured Nation, and Preferential. The General column rates are applicable to certain countries such as Japan. The MFN column rates are applicable to the United States and some West European countries. The Preferential column rates apply to the United Kingdom and some other British Commonwealth countries.

Tariffs and import licenses are in effect on most agricultural products imported by South Africa. Tariffs range from free to highly restrictive. The highest ones are on commodities for which South Africa generally has either a self-sufficiency or surpluses for export. However, within the existing range of tariffs on specific commodities, rates can be raised or lowered under the existing umbrella, or rebates can be paid. For example, substantial rebates are paid on brown rice and parboiled brown rice for processing within the country in contrast with the full rate applicable to polished or other fully milled rice. The following are representative duties on agricultural imports from the United States:

Selected agricultural imports from the United States	Duty
	Percent ad valorem
Asparagus	20
Hops, lb. (packaged for retail)	20
Hops, lb., bulk (not packaged for retail)	5
Printed synthetics	10
	Dollars
Rice, grain, 100 lb	3.50
Maximum rebate on rice in husk	1.61
Maximum rebate on husked rice (not further worked)	1.12
Tobacco, lb. (unmanufactured)	.49
Wheat, grain, 100 lb	.36

Among U.S. agricultural imports allowed to enter duty free are cotton lint, field and vegetable seeds, hog sausage casings, and edible and inedible tallow.

There are no export tariffs. Any losses on exported commodities, such as corn, grain sorghums, and occasionally oilseeds and oils, are recouped from individual commodity board stabilization funds. Losses on exports of tobacco are met through a complex subsidy system involving the tobacco trade, tobacco cooperatives, and the Tobacco Board. Buying agents of the Tobacco Board may not sell flue-cured tobacco domestically below prices set by the Board but they may do so for export.

Most agricultural commodities are exported at world prices. There are no quantitative controls on exports, except those necessary to limit exports of such basic food commodities as wheat, corn, and meat in times of domestic shortages. Export subsidies are indirect in the form of lower rail rates on some agricultural commodities moving into export, or even in domestic trade channels. Rail rates were generally increased in 1966 for all export and domestic commodities.

Subject to restrictions by South African commodity boards and sanitary controls, trade between South Africa and Swaziland, Lesotho (formerly Basutoland), and Botswana (formerly Bechuanaland) constitutes what is, in effect, a common market and common customs and currency areas. These arrangements have existed in various forms under direction of the United Kingdom since the 1890's.

Bilateral trade agreements are important to South Africa. In recent years strong trade arrangements have developed with Japan. These involve the exchange of South African corn, sugar, and other agricultural products for largely industrial items, including trucks and cars, from Japan.

Of considerable importance to South African agriculture is the bilateral agreement with Portugal on behalf of Mozambique for the use of Mozambique port facilities and railways. This agreement, popularly known as the Mozambique Convention, was first negotiated with the Orange Free State in the last century. A revised version of the Mozambique Convention was negotiated in 1965. It provides for a slight reduction in the quantity of South African commodities moving through the port facilities of Lourenco Marques. These include corn, sugar, and citrus exports, and some wheat among the agricultural imports.

Another important bilateral trade agreement is a long-established agreement with Rhodesia which was revised before Rhodesia's Unilateral Declaration of Independence. It provides reciprocal, duty-free treatment for several agricultural and manufactured products, including cotton, corn, livestock feeds, grain sorghum, oilseeds, and deciduous fruits, subject to import permits by each country to protect domestic production or to avoid seasonal surpluses. One provision requires South Africa to take annually a minimum of 2 million pounds of Rhodesian flue-cured tobacco. South Africa also imports Rhodesian burley and other types of tobacco not included in the agreement.

Malawi and South Africa entered into a trade agreement in early 1967 in which South Africa agreed to purchase a minimum of 500,000 pounds of Malawian tobacco and to give preferential treatment to several agricultural products from Malawi, including cotton, rice, bananas, beans, and tea.

Most-favored-nation treatment is accorded to Angola, Mozambique, and Spain. For instance, under systematic arrangements with South Africa's Banana Board, seasonal quantities of bananas to supplement domestic production are imported systematically from Mozambique. This does not preclude imports from other sources if bananas are not available in sufficient quantity from Mozambique.

South Africa still enjoys preferential duty-free treatment in the United Kingdom market for fresh apples and canned deciduous fruit, particularly peaches, apricots, and pears. South Africa is no longer a member of the Commonwealth Sugar Agreement, but the United Kingdom is still an important market for sugar from South Africa.

South Africa has no specific general policy or trade concessions to the less developed countries, nor is there a specific policy to encourage trade with the USSR or other Communist countries.

Agricultural Development and Productivity

Plans and programs for agricultural development and increasing productivity do not have priority over other segments of the economy, although these programs do provide for a general increase in self-sufficiency in agricultural products. Decentralization of industry away from Johannesburg and Pretoria is being stressed to develop employment opportunities in areas adjacent to the Transkei and other planned "Bantu homelands."

Efforts to produce coffee have been started in selected frost-free areas in Natal and Transvaal. However, greater encouragement is being given to tea production, since in most years tea is South Africa's largest agricultural import. Four large estates, totaling 5,900 acres, are now being developed in the Eastern and Northern Transvaal, Natal, and the Transkei, with the first crop to be harvested in 1968. The most recent tea project has been the planting of about 1,500 acres in the Transkeian district of Lusikisiki. It is planned that this project will eventually encompass about 4,500 acres and become a key industry in the Transkei. The growing by Africans of New Zealand flax (Phormium tenax) for fiber is being encouraged in suitable areas in Natal.

Government aid in reducing the cost of fertilizers has promoted a rapid increase in use of fertilizers on white farms. Mechanical land preparation, cultivation, and harvesting are still expanding. The country is becoming more nearly self-sufficient in fertilizers. The production of livestock and field and tree crops outside the African reserves and homelands is overwhelmingly commercial, rather than subsistence. The country has one of the most highly developed veterinary and disease control organizations in the world, including the long established and world renowned Veterinary Institute at Onderstepoort. Increased attention is being given to soil and water conservation and study of groundwater supplies, as well as improvement of irrigation practices. Systematic efforts are being made to prevent excessive fragmentation of farm and livestock rangeland into uneconomic units. In 1966, a new Department of Agricultural Credit and Land Tenure was formulated to unify farm credit and land tenure policy. (Robert C. Moncure)

SUDAN

The agricultural policies of the Sudan are directly correlated to the implementation of the Ten-Year Plan of Economic and Social Development (1960-70). The longrun economic policy is directed at giving strong support to the agricultural sector and at the same time developing the economic and social infrastructure of the country.

Prices, Markets, and Foreign Trade

The Sudan is primarily an agricultural country, and approximately 95 percent of its foreign exchange is earned through the sale of agricultural products. The principal imports of the Sudan consist of agricultural machinery, transportation equipment, and textiles; its principal exports include cotton, peanuts, and gum arabic. Planned diversification of agriculture and development of industry should stimulate additional trade activity and investment opportunities.

By and large, the Sudan has maintained a liberal trade policy, although luxury goods and goods considered undesirably competitive with local production have been subject to quantitative restrictions.

The customs tariff, primarily revenue-producing rather than protective, is applicable

to goods from all countries without preference, with the single exception of the United Arab Republic (Egypt), which is granted preferential rates.

The Sudanese tariff makes use of both specific and ad valorem tariff rates. Specific rates are applied almost exclusively to alcoholic beverages and tobacco, however. Ad valorem duties range from "free" to 400 percent and are assessed on a c.i.f. basis. Commodities not specifically mentioned in the Sudanese Customs Tariff Schedule are dutiable at 40 percent ad valorem. The very high rates apply mainly to luxury goods, such as jewelry, and other items considered nonessential. The rate of duty on capital goods and raw materials varies from "free" to 60 percent, with the average rate on such goods being approximately 25 percent. Import licenses protect locally produced items, but for the most part commodities have been imported under an open general license.

In recent years, Sudan's foreign exchange reserves have declined. This has led to the introduction of stringent import controls which have resulted in a virtual ban on all but essential goods or goods under bilateral trade agreements. In September 1966, a 5-percent ad valorem duty was placed on all imports, and a ceiling was placed on all imports. If the Sudan's foreign exchange earnings increase, a relaxation of these restrictive measures is planned.

The Gezira Management Board handles the ginning and marketing of nearly all cotton grown in Sudan. It is sold at auctions almost entirely to export buyers. As of January 1, 1967, the export tax on cotton ranged from a high of 2.10 cents a pound for best grades to a low of 0.72 cents a pound for low grades. Sudan is a member of the International Advisory Committee.

There are no price controls on grain. However, at various times, the Sudanese Government has controlled prices by limiting the exports of grain. The harvesting and marketing of gum arabic are left to private producers, but the Central Government supervises auctions where the gum is sold.

Agricultural Development and Productivity

The Ten-Year Plan embraces two major areas--the development of land resources and the diversification of agricultural production. The specific targets of the Plan are: (1) To expand agricultural production; (2) to increase the size of the agro-industrial sector; (3) to increase and diversify agricultural exports and at the same time reduce imports of commodities that can be produced locally; (4) to increase employment by over one-half million; and (5) to improve the social infrastructure of the country including education, health, and other services.

Agricultural production targets to be achieved by the Plan call for the following increases in commodity output: long-staple cotton, 60 percent; sesame, 46 percent; millet, 66 percent; and peanuts, 109 percent. The Plan, which includes over 260 projects, calls for an investment of $1.5 billion. Over $287 million of this total is planned to be financed by foreign loans. Two dams will greatly extend the irrigated land--the Khashm El Girba Dam, completed in 1964, and the Roseires Dam, completed in 1966.

Land reclamation is centered mainly around the development of new irrigated areas. Research is being conducted to find new crops for export. Along with expanding the production of wheat, rice, oilseeds, dates, and tobacco, increasing efforts are directed toward the production of short-staple cotton and livestock.

The Sudanese Government has inaugurated several small agricultural reform programs. The objective of these programs has been to increase agricultural productivity and improve living conditions in rural areas.

Government action has been initiated to provide improvements in tenancy and, in some areas, a limited redistribution of land.

In northern Sudan, the right to individual ownership of land is recognized in Islamic Law. In parts of central Sudan, land is held commercially. Settlement rights and subsequent registration have not been extended to farmers in all southern provinces.

The important cotton-growing enterprise in the Gezira is very closely supervised by the Gezira Management Board, a quasi-government organization. This Board supplies growers with all necessary production inputs. Cottonseed for planting and fertilizer are issued annually to growers.

Agricultural Aid

Overseas aid and technical assistance have been provided by many nations and international organizations. Through fiscal year 1965, U.S. aid totaled $89.8 million. Aid projects range from loans for dams, irrigation schemes, and supplying locomotives to the establishment of a Soil Survey Division.

Many of the proposed industrial projects are important to the development of the agricultural sector. Typical is the planned $4 million durra plant which will produce starch and vegetable oil, with a byproduct of animal feed. In 1966, the Agency for International Development approved a loan to assist with construction of the plant. The U.S. Export-Import Bank approved a loan of $3 million for constructing and equipping a gin for the Khashm El Girba Cotton Scheme.

The most recent Public Law 480 agreement with the Sudan, signed in April 1966, programmed 65,000 tons of U.S. wheat and flour for consumption in the Sudan. (Carey B. Singleton, Jr.)

TANZANIA

Changes in national policy regarding external trade and business have altered Tanzania's position with relation to its East African neighbors and the world. Heretofore, the trade policy of Tanzania, that is, Mainland Tanganyika, has been tied closely to that of Kenya and Uganda through the East African Currency Board and the East African Common Services Organization. This latter organization still supervises customs and trade for the three countries. However, in 1966, most of the functions of the Currency Board were transferred to newly created central banks for the three countries. Tanzania's Central Bank began operations June 14, 1966, at which time new currency notes were also issued to replace those formerly issued by the Currency Board. Tanzania's new coins were issued August 1, 1966. The new currency was on a par with the old East African shilling.

On February 5, 1967, the banks of the country were nationalized. A few days later, major export-import companies, life insurance companies, and large estates were also nationalized. However, foreign private investment is welcomed in certain sectors of the economy.

Prices, Markets, and Foreign Trade

Members of a marketing association or cooperative deal with their organization, which, in turn, is under a central control board for a specific commodity or group of commodities. In addition to specific commodity boards, there is a National Agricultural Products Board which guarantees the prices for such crops as corn, castorseed, sunflowerseed, peanuts, cashews, sesame,

and rice. This central organization sets the price to farmers after consideration of cost factors and market trends, and this price then exists for the entire marketing season. The National Agricultural Products Board also controls the quantity offered for sale and usually operates through cooperatives. Where there are no cooperatives, agents are appointed to insure country coverage and spot crop failures or excess production. When losses are sustained by a marketing board, they are underwritten by the Government. Subsidies, as such, however, have been avoided for agriculture.

A major step in African economic cooperation and development was taken on June 6, 1967, when the Presidents of Tanzania, Uganda, and Kenya signed a treaty creating the East African Community. The EAC is a common market for the member countries and replaces the East African Common Market (EACM), a de facto customs union. (See p. 15 for a detailed description of the EAC.)

The external trade of Tanzania is conducted essentially on a nondiscriminatory basis under a one-column tariff, with import duties applying equally to goods from all countries except Kenya and Uganda. Duties may be specific, based on weight or quantity, or may be ad valorem, based on whether the item is a necessity or luxury. A combination of the two types may also be used, in which case the rate yielding the highest revenue applies. Many items essential for education, health, or economic development are duty free. Additional excise taxes are levied on certain items, including alcoholic beverages, sugar, tobacco, and tobacco products. Commodities are imported under an Open General License or a specific import license, valid from the date of issue until the end of the calendar year. An exchange permit, issued by the control authority, is required, but the granting of the license generally guarantees release of the required foreign exchange.

<u>Agricultural Development and Productivity</u>

Tanzania's Five-Year Plan for Economic and Social Development began in June 1964 and will run until July 1969. This is the first stage of a long-range program with planned goals for 1980. It is the stated policy that by 1980 the Government will achieve a prosperous balanced economy that will double the per capita income. The overall objective is to be accomplished principally through an increase in the cash returns of agriculture and through stepping up internal industry to reduce imports.

By encouraging increased farm production for the cash market, the Plan recognizes the importance of agriculture in the national economy. Approximately 85 percent of Tanzania's consumers are farmers whose effective demand for goods dominates the market and sets the scope, diversity, and pace for the other sectors of the economy. In recent moves toward economic improvement, Tanzania has made it clear that it intends to step up domestic production of manufactured items, many of which use agricultural raw materials. Farmers and workers have been called upon to work harder to reach the development goals.

Among Tanzania's plans for increasing farm production are Government-operated ranches, state farms for oilseeds, rice, wheat, and sheep, extension of credit, and expansion of extension service activities. These steps point toward more collectivization of agriculture in the future.

Government policy toward social measures is directly related to the agricultural development plan. Special priority is given to community development, adult education, agricultural education, and the raising of living standards through group activities.

The national goal for self-sufficiency in food crops is combined with goals to improve the quality of export commodities in order to better compete in the international market. (H. Charles Treakle)

As part of its overall economic development plans, Tunisia plans to modernize and diversify its agricultural sector.

Prices, Markets, and Foreign Trade

The Tunisian Government regulates marketing and prices to protect the consumer against inflation and to stabilize farm incomes. Producer prices are fixed for wheat, barley, pulses, and cotton purchased by the National Office of Cereals, Legumes, and Other Agricultural Products. This Office pays a guaranteed price to the cooperatives which own the grain silos and carry out the marketing operations. Pricing as an incentive for shifts in agricultural production has been used very little by the Tunisian Government. In fact, some pricing procedures in the past have discouraged shifts, such as the premium paid hard wheat producers, although the national plan calls for a shift to more soft wheat production.

The Government's Oil Office establishes floor prices for olive oil and utilizes its reserve stocks and imported vegetable oils to stabilize the oils market in the face of the yearly fluctuations in domestic oil production.

In the past, producer prices for wine have been fixed by the Government's Office du Vin (wine office) on the basis of French prices, but the present price levels may be established in other ways because of the recent French resistance to buying Tunisian wine.

Prices to local agricultural processing industries are fixed by Government arbitration between producers and processors. The retail prices of basic foods are also fixed.

Agricultural Development and Productivity

Tunisia's development plan for 1962-64 gave special emphasis to decolonization, and all farms formerly owned by foreigners were in Tunisian hands before the end of 1964. Cooperatives made substantial progress under the first plan and are being extended under the current plan to a large proportion of the better agricultural land. Cooperatives are presently Tunisia's main type of farm organization.

The Government now has direct control over much of Tunisia's agricultural production because of its sizable land holdings and its tight control over the activities of production cooperatives. It has restricted the area planted to tobacco and vineyards for many years.

To increase production, Tunisia has planted more fruit trees and initiated programs to improve farm practices and soil conservation. A specialized credit institution for agriculture has been established, and loan funds have been made available for agricultural improvements. In the field of agricultural education, a substantial effort is being made to improve vocational training and to accelerate the development of specialists to start filling the great need for agricultural expertise.

Total agricultural investments under the 1965-68 plan, including some for fisheries and forestry, are scheduled at roughly \$79 million. This compares with the proposed expenditure of about \$61 million in 1962-64 and an actual investment in that period of under \$30 million. Planned investments for agriculture, fisheries, and forestry are about 33 percent of the total planned net investment for the 1965-68 development program.

Agricultural credit is supplied to farmers by the National Agricultural Bank, supplemented by the Tunisian Provident Societies. Local groups of farmers cooperate with the Bank's 23 branch offices in granting loans and obtaining repayment. From 1959 to the end of

fiscal year 1965, the United States supplied about \$11.5 million to the Bank through counterpart funds, Public Law 480 funds, and development loans under the Agency for International Development.

Cooperative credit has made little progress, although production and supply cooperatives sometimes extend credit on supplies purchased from them.

Agricultural Aid

Since its independence in 1956, most of Tunisia's foreign aid has come from the United States, which provided over \$500 million in economic assistance through fiscal year 1967. France, other West European countries, East European countries, and international organizations have also supplied assistance to Tunisia. (Carolee Santmyer).

UGANDA

Agriculture is the foundation and dominant feature of Uganda's economy. It accounts for almost two-thirds of the gross domestic product (GDP), employs roughly 95 percent of the labor force, and provides approximately 85 percent of the foreign exchange earnings. Some 75 percent of these earnings accrue from two cash crops--coffee and cotton. During the last 5 years, about 50 percent of Uganda's export earnings came from coffee and 25 percent from cotton. On the other hand, more than half of the land currently under cultivation is devoted to subsistence production for the farmer and his family.

Because of Uganda's dependence on two cash crops, fluctuations in the market are soon felt in other sectors of the economy. Therefore, crop diversification is of prime importance in the Government's agricultural policy, along with development of the livestock industry.

Prices, Markets, and Foreign Trade

For the major export commodities--coffee and cotton--the price and handling margins of cash crops are set by the Government, and the basic policy is to establish producer prices in line with world market prices. There has been very little Government price support to encourage agricultural production, but the farmer does know the price he will receive for his coffee and cotton crops before he markets them each year. The Coffee Marketing Board and the Lint Marketing Board administer the marketing processes through cooperatives or private agents.

The plans for diversification of crops and the increases in livestock production will call for a better marketing system and improved marketing facilities. At present, most of the marketing mechanism is still in the planning stage as part of Uganda's second 5-year plan (1966-71).

Subsidies to agriculture are of relatively minor importance. Until recently, the Lint Marketing Board absorbed losses in its cotton account. These losses could be regarded as indirect subsidies. Insecticide for spraying cotton is heavily subsidized, and cottonseed for planting is made readily available. The Government has also assisted in setting up group farms and has provided tractors, although the farmers must pay for their use.

Generally, it is Government policy to encourage marketing and processing of farm produce through cooperative associations--about 40 of some 130 cotton gins are now cooperatively owned.

Uganda is a member of the East African Community (EAC). EAC is the new common market for Uganda, Kenya, and Tanzania

created in 1967 under the provisions of a treaty signed by the Presidents of the three participating countries. (See p. 15).

Agricultural Development and Productivity

In mid-1958, the International Bank for Reconstruction and Development (IBRD) was approached for assistance in expanding Uganda's electrical facilities. This request initiated a study of the economy of Uganda, and recommendations were completed by IBRD in 1961. In the same year, the Ugandan Government embarked upon the first of four 5-year development plans projected to run until 1981. The initial plan, which followed closely the suggestions and recommendations of the IBRD study, provided a base for future development and subsequent plans.

Uganda's second 5-year plan covers July 1966 to June 1971. Although the first plan considered the overall economy of Uganda, the second plan is based on a far more detailed survey of each particular sector of the economy. It is regarded as a carefully planned step in a continuing program for the next 15 years. This program calls for a thorough transformation and expansion of the base of Uganda's economy and a doubling of the per capita cash income. Thus, this 15-year program maps out the structural changes for the economy, and the second 5-year plan launches the necessary developments for agriculture and industry.

The second 5-year plan will require expenditures of some $644 million, 17 percent of which have been allocated to agriculture. In addition, agriculture will benefit indirectly by development and expansion in other sectors, especially where new industries utilize agricultural raw materials. Because the greater part of Uganda's population farms for its livelihood, agriculture is considered a spearhead for development activity. Farm production is programmed to keep ahead of food needs of the expanding population, provide the people with improved diets, and supply more and better crops and livestock for export.

The second plan states: "The pursuit of increased agricultural output will be combined with long-term agricultural diversification." Emphasis is placed on special efforts to expand the production of tea, sugar, peanuts, tobacco, and other cash crops which are now of only minor importance, and all farmers are encouraged to grow at least one cash crop. To help these farmers, special marketing facilities will be arranged. In addition to diversification of crops, increases in the production of livestock products are projected through expansion of the livestock industry and better disease control. Acreages presently devoted to robusta coffee will be reduced and planted in arabica coffee and other crops. Stress is placed on improving the quality of coffee, thereby increasing the unit value of the crop.

Under the current plan, cotton acreages will be maintained, but a major expansion in the cotton crop is scheduled through pest control, the use of fertilizer, the introduction of higher yielding varieties, and the adoption of more modern cultivation techniques.

Farm improvement plans and efforts to increase yields will be guided by a strengthened extension service. Short-, medium-, and long-term credit will be expanded. By 1971, it is hoped that over 150,000 farmers will be receiving short-term loans of $28 to $42 each. This credit would go primarily to cotton growers but would also be available to other farmers. Some 5,000 farmers are to receive medium-term credit of up to $280, repayable over a 2-year period. An additional 4,500 large-scale farmers are slated to receive loans of up to $700, repayable over several years. It is also expected that more high quality seed, insecticides, fertilizer, and tractor-hire services will be provided.

Forty group farms were begun under the first 5-year development plan, and an

additional 100 are scheduled to be set up under the second plan. Approximately 800 tractors will be stationed on group farms, and an additional 450 will be provided for tractor-hire stations.

Social measures for education and training in rural areas are projected through expansion of the extension service. This will increase both the number and quality of extension service workers. Currently, there is one extension worker for 2,000 farmers. Hopefully, this ratio will be reduced to one worker for every 1,000 to 1,500 farmers. The four main fields of agricultural education that are to be expanded are: (1) Training of agriculturists and veterinarians to work with extension people on group farms; (2) training for the administration and management of co-operatives; (3) short courses for farmers, and (4) primary and secondary schooling for those wishing to study modern farm practices and management. In another area, but closely related to agricultural development, the second plan sets goals for social and economic justice. These goals include improved wage rates and increased educational, medical, and other services to be provided by new schools, hospitals, and community centers.

Agricultural Aid

Uganda hopes to obtain considerable foreign aid to assist in financing the second 5-year plan and is also seeking more private capital for development. The agricultural aid extended by the United States is tied directly to the national development plan. Food aid from the United States under Public Law 480 has been small.

A number of countries have given aid to Uganda in the form of loans, grants, and technical assistance, but the United Kingdom has been the largest contributor by far. (H. Charles Treakle)

UNITED ARAB REPUBLIC

The basic agricultural policies of the United Arab Republic (Egypt) aim at expanding cultivated area, increasing self-sufficiency, expanding and diversifying exports, and improving living standards in the rural sector. To achieve these goals, comprehensive agrarian reform and development programs have been undertaken.

Prices, Markets, and Foreign Trade

During the past decade trade in the United Arab Republic has been increasingly oriented toward the Communist countries of Eastern Europe. The Arab-Israeli War of June 1967 caused an abrupt shift in source of imported bread grain. In recent years, the UAR has obtained most of its imported bread grain from the United States. But in 1967 and the first half of 1968, the bulk of grain shipments came from the USSR, with other Communist countries supplying substantial amounts; no grain was imported from the United States. History will determine whether this shift is an actual change in policy or whether it is merely a stopgap measure to fill an emergency need.

Foreign trade is virtually a monopoly of the state. A strict exchange control system is used to regulate foreign trade. Such a system also acts to conserve foreign exchange earned from hard currency areas and to balance trade with the countries with which the UAR has bilateral trade agreements. Much of the trade in recent years has been carried out under some form of barter arrangement.

Except for basic food items, imports of consumer items are prohibited. Other im-

ports are limited to essential industrial raw materials and capital goods.

The importation of live plants and animals is under strict control. Cotton plants, cottonseed for planting, raw cotton, and cotton waste imports are not allowed. Imported animals, fruits, and vegetable products are subjected to inspection and quarantine regulations.

Although grains and grain preparations and vegetable oils are exempted from duties, duties on certain farm commodities have been greatly increased in recent years. As of mid-1967, the duty on tobacco was $6.38 a pound, compared with $5.07 a pound two years earlier. Rice, onions, and molasses are subjected to export duties. However, export duties have been eliminated on cotton. At various times in recent years, other incentives have been used to promote foreign sales of cotton.

The United Arab Republic was admitted to provisional membership in GATT (General Agreement on Tariffs and Trade) in 1962 and is a member of the International Wheat Agreement. The UAR is a member of the Arab Common Market that went into effect on January 1, 1965. This trade group plans a lowering of trade barriers, free exchange of currency and skilled workers, and cooperative sharing of transportation facilities. To date, however, this group appears to have had little effect on overall economic activities in the area.

Internal Market and Price Regulation

Prices of basic food items are fixed by the Ministry of Supply. The purpose is to control inflation and thus keep prices within the purchasing range of the low-income masses. At other times, price controls have been used to limit or curtail consumption of certain items, thereby making larger quantities available for export.

The Government has extended its controls over all phases of marketing and operates major marketing facilities. The Egyptian farmer markets his farm products through rural cooperatives supervised by the Government. Producers' prices are adjusted to stimulate output. Prices for the main export crops are often determined by their quality, along with the degree to which preestablished production quotas are met. On other occasions, a bonus has been paid farmers who deliver onions meeting export standards prior to March 5. Nevertheless, prices paid farmers for major export crops--cotton, rice, and onions--range far below their actual value. Except when Government cooperatives purchase domestically produced commodities at a set price, there are no supports for farm production.

Farm prices for the 1966/67 wheat crop averaged $69.35 per ton. Payments for paddy rice amounted to $58.35 per ton plus a bonus for all quantities in excess of mandatory delivery requirements. The General Cotton Organization announced that it would pay local cooperatives prices ranging from 23 to 49 cents a pound for the 1967/68 cotton crop. Growers would receive less than the price to cooperatives. In addition to the actual price received, producers could obtain a bonus of 1 to 5 cents a pound for quality production.

Agricultural Development and Productivity

The overall development program aims at doubling national income within the decade ending in 1970. The first phase of the program was originally scheduled to cover a 5-year period but, due to the short supply of foreign currency, it was extended to 7 years. A 3-year achievement plan was officially approved, effective July 1, 1967. Total investment during the 3-year period was scheduled at $3 billion, of which $644 million was allocated to irrigation, drainage, and other phases of the agricultural sector.

In light of extremely limited physical resources, the UAR has followed two main lines of agricultural development. These are: (1) the "horizontal" development of agriculture--the extension of the area under cultivation through the reclamation and irrigation of desertland; (2) the "vertical" development of agriculture--measures to increase productivity of land already under cultivation through better irrigation and drainage and through greater use of fertilizers, better seed, and improved methods of pest control. These measures are supported by research and extension work, credit, marketing facilities, and other production necessities.

As a result of amendments to the Land Reform Law of 1952, maximum individual holdings are limited to 104 acres. The maximum which can be leased by one individual is 52 acres. Efforts have been made through the Agrarian Reform program to consolidate small holdings and fragmented farms to gain the economies of large-scale operation. Provisions are also made for the organization of Government-controlled cooperatives, with membership compulsory for farmers receiving land under the reform program.

The High Aswan Dam, the core around which the country's development program is built, is scheduled for completion in 1968. There are no indications that the 1967 political crisis and armed conflict in the Middle East will cause any delay in the dam's completion date. Plans call for 156,000 acres of new land to be brought into production each year until the country's water resources are used to capacity. The ultimate goal is to reclaim over 1.3 million acres under the country's long-range program.

Some notable successes have been achieved in expanding production on land currently under cultivation. Government plant breeders are continually introducing new cotton varieties as the older ones decline. A new wheat variety, which yields nearly 75 bushels an acre under ideal growing conditions, has been developed. Another program that promises to increase production is the conversion of 727,000 acres from basin irrigation to perennial irrigation as water from the High Dam becomes available.

Rice, citrus fruits, flowers, and winter vegetables are receiving greater attention as export crops. Efforts are also being made to develop the full potential of the livestock industry, both to increase the country's self-sufficiency level and to reduce annual foreign expenditures required for imports of livestock and livestock products.

Government assistance to small producers and cooperatives includes the extension of credit on liberal terms and the supplying of irrigation water without special fees or land taxes. The Government also provides farmers with new seeds for the main crops each year.

Agricultural Aid

In recent years, financial resources for development purposes have come from budgetary surpluses, contributions from Government financing agencies, public borrowing, and foreign aid. The share of each is not publicized. In addition to substantial loans from various foreign countries and the International Bank for Reconstruction and Development, economic and technical assistance has come from Czechoslovakia, East and West Germany, Japan, United Nations, United States, USSR, and Yugoslavia.

The UAR has maintained a corps of well-trained agriculturists and for years has been a main source of qualified agricultural technicians for other Arab countries. Even so, the Food and Agriculture Organization of the United Nations has supplied the UAR with a large number of consulting technicians. UNESCO has assisted with rural educational programs. The Rockefeller and Ford Foundations have concentrated much of their assistance to the UAR in recent years on a

selected number of institutions devoted to research and the training of highly skilled professional personnel needed in critical fields. The World Health Organization is carrying on public health work in the rural areas. (Carolee Santmyer)

UPPER VOLTA

The principal agricultural policy objective in Upper Volta is to improve the level of living of the people. Ninety percent or more of the population is totally dependent on subsistence farming (including herding) for a living. Efforts to improve the quality and quantity of both subsistence and export crops are underway by the Government, including agricultural research, extension, and education efforts. Progress, however, is severely limited due to poor soil (except in the south and along the rivers), lack of rainfall, budget limitations, and the resistance of the people to change from traditional production methods.

Prices, Markets, and Foreign Trade

Prices to producers are fixed by the Government for oil crops, subsistence crops, and cotton. For the 1966/67 season, Government purchase prices per pound for oil crops delivered to Ouagadougou were as follows:

	Cents
Shelled peanuts	4.9
Unshelled peanuts	2.9
Shea nuts (karite)	1.3
Sesame	4.9

When these products are delivered to Bobo-Dialasso, purchase prices are slightly higher. For producing areas other than those near Ouagadougou and Bobo-Dialasso, these prices are discounted to reflect transportation differentials.

Subsistence grains were purchased at the following prices per pound:

	Cents
Grain sorghum	1.7
Millet	1.7
Corn	1.8
Rice	2.9

Seed cotton was purchased for 6.2 cents for "Allen" cotton and 5.5 cents for second-quality cotton. Industrial crops are commercialized and exported through state marketing agencies or agencies designated by the state. In the past, France annually purchased fixed quantities of Upper Volta's cotton and peanuts at prices above those prevailing on international markets.

As in the other countries formed from former French West Africa, Upper Volta imposes a number of complex tariffs or customs duties. When these duties are added together and the retail markup superimposed, the price of imported goods tends to be beyond the financial means of the would-be buyer.

There are two separate basic import levies: (1) a fiscal import duty, which averages between 10 percent and 15 percent; and (2) the customs duty, which for most goods ranges between 5 percent and 25 percent. Except for a few specified products, the fiscal import duty is levied uniformly on all goods, regardless of source or origin. The customs duty is an additional levy assessed only on goods of non-franc-zone origin.

As an associate member of the European Economic Community, Upper Volta extends preferential tariff and licensing to the European members of the EEC. Goods originating in the countries of the EEC, other than France,

are dutiable at 30 percent less than the minimum tariff. Goods of franc zone origin are not subject to the customs duty.

In addition to belonging to the UDEAO (Union Douaniere des Etats de l'Afrique de l'Ouest--West African Customs Union), Upper Volta is a member of the Entente Council, which includes the other African states of Ivory Coast, Dahomey, Niger, and Togo. The customs tariff schedule of each of the Entente States lists a tariff of minimum customs duty rates applicable to the countries (including the United States) which have recognized trade agreements with the nations of the Entente. Products imported from countries which do not have trade agreements with the members of the Entente are subject to a general tariff computed at three times the minimum rates.

Agricultural Development and Productivity

Farm improvement efforts include the distribution of small animal-drawn plows to farmers on favorable credit terms, and the limited distribution of fertilizer and instruction in its use. Agricultural research and extension activities are also underway.

Farm structure and tenure still follow traditional patterns. Despite efforts to expand production, export crops continue to represent a declining proportion of total agricultural production. In 1963, cash crops made up 12 percent of total production, compared with 31 percent in 1951.

Upper Volta was one of the first West African states to adopt a rural education program. In 1961, with the help of FED (Fonds Europeen de Developpement--European Development Fund), rural schools began a program of giving children three years' training in basic literacy and an introduction to modern farming methods. In 1967, some 12,000 students were enrolled in 272 schools throughout the country. A training school at the Kamboinse Research Station prepares young men from 18 to 24 to return to their villages as rural "moniteurs" (teachers) to demonstrate modern agricultural methods in cooperation with the various rural extension organizations.

Agricultural Aid

The FAC (Fonds d'Aide et de Cooperation--French Assistance Fund) has spent more than $11.5 million for agricultural development in Upper Volta since 1959. In addition to rural education projects, the EEC has provided assistance funds for soil and water conservation projects, well digging, and dam construction. (Snider W. Skinner)

West Asia

IRAN

Iran's agricultural policies are principally influenced by a combination of four elements: Oil, the national development program, the reform program, and the weather. Although the economy is basically agrarian, income from petroleum has provided substantial foreign exchange and Government revenue to support the programs for national improvement. Three of these programs have been completed, and the fourth is underway. The basic physical infrastructure for a modern economy thus achieved has been integrated with far-reaching reforms which have tended to alter the social structure of Iran. The national economy has improved, although problems have been created with industrial

development outdistancing progress in the agricultural sector.

In a country as dry as Iran, where there is barely enough rainfall to allow dry farming in limited areas, the influence of the weather is keenly felt. In recent years, Iran has had favorable weather, and the reasonably satisfactory performance of the agricultural sector has been aided by increased use of fertilizer, the land reform program, more extensive irrigation, improved pest control, and better agricultural credit facilities.

Although Government policies are directed toward promoting agriculture's role in national development, improvements in agriculture and the increase in farm production have not matched the planned annual rate of growth. The land reform program has been generally successful, but has created new problems in management, credit, and marketing.

Prices, Markets, and Foreign Trade

Iran has not made extensive use of fixed or support prices for agricultural commodities. Those that have been used are of two types: Set prices for Government-purchased items, such as wheat; and prices paid for commodities controlled by the Government monopoly, including tea, sugar, and tobacco. Some prices are affected by the commercial profits tax on imports, but generally these taxes are used more as a protective device than for price support. Iran's overall price structure has remained stable, despite a fairly rapid rate of economic growth in the past several years. There have actually been a few slight declines due to administered price reductions in some consumer items--sugar, gasoline, and electricity, for example.

One important food cost that has perennially caused concern is the price of bread. Efforts to control bread prices have continued since 1933, when high costs in urban areas first attracted the Government's attention to cereal prices and the market. A Bread Administration was established at that time, later becoming the Bread and Cereal Administration, first under the Ministry of Finance and now under the Ministry of Agriculture. Originally, the Government's objective was to buy grain and fix a price to prevent holding and speculation, thereby keeping the price of bread lower. To do this, up to 25 percent of the wheat produced was purchased by Government centers. However, since 1956, producers have been free to sell wheat on the open market. Official prices change from year to year for wheat from the various producing areas. At times, the free open market price is at a par with the Government price or even lower. The Government, in turn, sells wheat to bakers at a set price. Since the baker's share of Government silo wheat has been fixed and usually falls short of his requirements, he fills his needs by purchases from grain merchants.

With the establishment of cooperatives for the distribution of flour, it is planned that bakers will get more flour at lower prices, thus aiding provisional programs to stabilize the price and standardize the quality of bread.

Attempts to set fruit and vegetable prices have not met with success, but where there are contractual arrangements, prices are usually fixed. Sugar factories enter into annual contracts with beet producers, as do milk producers with Government pasteurization plants which sell fresh fluid milk at a fixed price. These milk sales, however, represent only a small portion of Iran's milk supply.

Monopoly prices for tobacco leaf are fixed by grade and area; the wholesale price of tea is also regulated.

Fertilizer that has been produced by the National Petrochemical Company is sold through the Chemical Bongah of the Ministry of Agriculture, as are Government imports.

Prices set by the Chemical Bongah represent a subsidy in some instances, since fertilizer is sometimes sold at cost or below.

Since the land reform program has been in operation, low-cost credit has constituted a subsidy which may be calculated by the number of points the bank credit interest rate drops below the bazaar or open market rate.

Iranian trade policy is designed to accomplish three main purposes. First, it provides protection for domestic agriculture and industry; second, it furnishes a means of control for regulating the balance of payments; and third, it promotes export trade.

All imports into Iran are controlled by the Government. Importable items are determined and listed by the Ministry of Economy, while the Central Bank has responsibility for administration of exchange controls designating the commercial banks which may handle foreign exchange transactions.

Each year the Ministry of Economy reexamines the import list in light of current conditions and development requirements, and issues a new set of regulations effective March 21, the beginning of the Iranian year. The import regulations list of "authorized" and "nonauthorized" import categories is subject to change. "Authorized" imports may be divided into two groups: imports for which prior Government approval is not needed (the overwhelming majority of items); imports which require a Government license, such as tobacco and pesticides. A limited number of imports, which are primarily agricultural products, are governed by bilateral agreements and may be imported only from the signatory country.

Iran's tariffs, which are nonpreferential, consist principally of specific rates. Ad valorem rates generally apply to imports in special categories, such as chemicals and industrial machinery.

Items exempted from tariff lists include breeding stock, soybean meal, fish, milk, fertilizer, and some industrial items.

Customs surcharges and internal taxes are levied on imports. These assessments are reexamined annually and adjusted in accordance with overall policy objectives. The tax on commercial profits is the most significant among the taxes and fees levied. It is used to augment import policy and tariffs in protecting the domestic economy and curtailing certain imports.

Monopoly taxes are assessed on a few imports, which include sugar, confectionery items containing over 40-percent sugar, and tobacco and tobacco manufactures. Imports are also subject to a number of minor levies or taxes usually on a metric ton basis and set as a percentage of the import duties and commercial profits tax. These levies include municipal taxes, a Red Lion and Sun Society tax (Iranian Red Cross), a port health tax, and a port unloading tax.

The 1967 regulation for imports and the related tariff and duties reflected increased protection through what the Government referred to as minor modification of the existing regulations. In 1967, agriculture was given greater protection.

Paralleling the Government's efforts to raise agricultural productivity is the increased protection stemming from the commercial profits tax. However, some adjustments and waivers are required where supports act at cross purposes, as in the case of feed grains. Supports for feed grains indirectly penalize livestock products. Domestic feed grain production is not sufficient to provide adequate feed for the growing dairy and poultry industry. The commercial profits tax on corn nullifies the protection accorded the dairy and poultry industries. Because imported dairy products compete with domestic production and make it more difficult for the Iranian dairy industry to grow, the commercial profits tax has been

increased for imported powdered milk and butter. There is no tax on imported dairy cattle breeding stock.

Imports of starch, wheat, rice, feed grains, and potatoes have been subject to a small commercial profits tax, but this tax can be waived when these products are imported by the Government. There is no commercial profits tax on soybean meal, fishmeal, or feather meal.

Although Iran is fundamentally a free-enterprise economy, it does have some state monopolies for certain groups of imports. The most important monopolies are for sugar, tea, and tobacco, but bilateral agreements also involve Government regulation of procurement.

Export controls are administered by the Ministry of Economy, and these controls are nondiscriminatory as to countries. The Ministry clears the exports through customs.

Export incentives include the payment of subsidies. Exporters are also eligible for loans from the Export Development Bank.

To further its foreign trade activity, Iran has established a number of bilateral trade agreements and bilateral trade and payments' agreements. These have stepped up trade with Czechoslovakia, Hungary, Poland, Romania, and the USSR.

Agricultural Development and Productivity

Organized development began in Iran in 1949 when the Plan Organization was established to carry out development projects by providing funds to the ministries and other agencies and through independently placed controls. Income from petroleum has been the principal source of capital, with 80 percent of oil revenues going to the Plan in 1967. Under the Third Development Plan (1962-68), 21 percent of all funds were allocated to agriculture and irrigation.

The Fourth Development Plan began in March 1968. It is expected that the agricultural sector of this Plan will place more emphasis on improving farming efficiency and on improvement of the livestock industry. Marketing should be aided by suggested improvements and extension of feeder roads, storage facilities, and electric power.

Although the seeds of agrarian reform had been planted much earlier, Iranian land reform is said to have begun in 1952 with the distribution of crown lands to landless peasants. Within a decade, virtually all these lands had been distributed; in 1958, the distribution of Government-owned land began. The land reform law of 1960 was revised and amended by the Land Reform Law of 1962. This new law provided a working plan for distribution of private land owned by landlords. With the revision of the Land Reform Program in January 1962, an integrated series of six other basic reforms was advanced by the Government to meet Iranian problems. Acting within the Constitution, these proposed reforms were set before the people in a national referendum on January 26, 1962, and were overwhelmingly approved. The original six reforms have since been increased to nine. Briefly, the nine points called for:

(1) The redistribution of land through the Land Reform Program;

(2) nationalization of the forests for conservation and proper management;

(3) sale to the public of shares of Government-owned industrial enterprises to raise funds and to provide investment opportunity;

(4) profit sharing of up to 20 percent of net corporate earnings to provide incentives for labor productivity;

(5) an amendment of the law to extend equal and universal suffrage to all Iranian citizens regardless of sex;

(6) the formation of the Education Corps with high school graduates conscripted to act as primary school teachers and multipurpose village-level workers in rural areas (a popular and highly successful program);

(7) the formation of a Health Corps of physicians, dentists, and medical technicians to dispense free treatment and medicines to the rural people and to improve health standards;

(8) the formation of the Agricultural Extension Corps to help farmers and the rural people acquire new skills and raise productivity; and

(9) the establishment of village courts under modern rules of law to hear minor cases of rural people.

Although all of the reform program points have had an impact on the Iranian farmer, the land reform program has instituted the greatest change. With the advent of the land reform program, an organization was needed to provide supervision and credit formerly supplied by landlords. Rural cooperatives serve this purpose, and the organizing of rural cooperatives was entrusted to the Agricultural Bank.

Early in 1963, the Agricultural Bank's charter was revised and it was renamed The Agricultural Credit and Rural Development Bank. Later in 1963, cooperative activities, which were growing rapidly, were expanded from a department in the Agricultural Bank to a separate agency called the Central Organization for Rural Cooperatives (CORC).

Cooperative society members are required to purchase shares in their societies, and a portion of the societies' capital is used to purchase shares in the CORC. In this way, the cooperatives, grouped through federations, will ultimately purchase all the shares held by the Agricultural Bank and place ownership of the cooperative movement in the hands of the farm cooperative federations.

Over 7,000 cooperatives, with a membership of more than a million farm families, are vital instruments in the development of Iran's agricultural resources, both natural and human.

Agricultural Aid

Iran has received considerable external aid and technical assistance from a number of foreign governments. Currently, emphasis is on technical assistance and bilateral arrangements.

The United States has been supplying economic and technical assistance to Iran since 1951, and over the years a large corps of U.S.-trained Iranian agricultural technicians has been developed. The Agency for International Development phased out its program in Iran in 1967 because increasing oil revenues made it possible for Iran to finance its development program from its own resources and foreign loans. Considerable U.S. assistance has also been extended to Iran through the Export-Import Bank and privately owned organizations, such as the Near East Foundation and the Ford Foundation.

Assistance in the form of loans and credits has been extended from France, the USSR, Germany, the United Kingdom, Italy, Japan, Poland, Hungary, Czechoslovakia, and Romania.

Israel has trained Iranian agriculturists in Israel and has also provided technical help in water use planning and the development of specific crops, including cotton, sugarbeets, and green forage.

Assistance has also been extended through the International Bank for Reconstruction and Development and the Technical Assistance Program of the United Nations.

A program for regional cooperation on development has been carried on through the Central Treaty Organization (CENTO). A

CENTO Subcommittee on Agriculture promotes projects for increasing production, general development, credit and banking, forestry, pest control, land classification, and soil surveys. Work is done to extend improved breeding practices and to control virus and parasitic diseases of livestock.

Closely allied to agricultural development are programs for the promotion of public health in the CENTO region. (H. Charles Treakle)

IRAQ

Agriculture, which engages roughly two-thirds of Iraq's population but utilizes only 18 percent of the country's land, remains the most underdeveloped sector of the economy. Government agricultural policies over the past 20 years have been directed toward planned development of agricultural resources and improved living standards for the rural people but have met with little success. These goals have been pursued through agrarian reform and a series of agricultural development programs financed chiefly with oil revenues. Impressive results have been accomplished in the form of dams and water control systems, but many programs, such as agrarian reform and the establishment of an extension service, have fallen far short, principally because of political unrest. In December 1966, the Government appointed a Supreme Council for Agricultural Planning to study means of rejuvenating the agricultural sector.

Prices, Markets, and Foreign Trade

Wheat farmers are assisted by the High Supply Committee of the Ministry of Finance and the Government Grain Board. Under jurisdiction of the High Supply Committee, \$5 to \$7 million is spent annually to purchase wheat at a set price.

Price stabilization is another function of the Grain Board. Supports have not been necessary in recent years, because wheat production has failed to meet demand and domestic prices have been above world prices. In years when production does not meet demand, the High Supply Committee imports wheat. Other activities of the Grain Board include the supervision of private trade and exports, the provision of silo facilities to farmers, and the retention of adequate reserves to cover emergency drought conditions. The Board also acts as an agent of the Government in bilateral trading when the High Supply Committee imports cereals.

Normally, there is an exportable surplus of barley.

The Government controls the prices of several other agricultural items, either directly, as with tobacco through the Tobacco Monopoly, or through publicly operated purchasing organizations. For example, in 1966 the Government Purchasing Board imported more than \$36.4 million in sugar, tea, and tomato paste. The Board expanded the allocation for 1967. The Government-operated Agricultural Chemicals and Machinery Company imports about 50 percent of all agricultural chemicals and has begun to import farm equipment.

The private sector of Iraq's import business has been limited since the Nationalization Law of 1964. This law authorizes the Government to control prices and direct agricultural plans.

Subsidies, as such, have not been extensively used in Iraq. Government-purchased wheat is sold to millers and bakers in large population areas to provide bread for low-income families at half price. In some areas where there are no bakeries, flour has been

made available at subsidized prices. Direct subsidy payments have been used for sugarbeets. Regulation of crop production by controlling the area under cultivation has been applied to tobacco, cotton, and rice.

Imports are controlled; import licenses issued by the Central Government, and exchange permits obtained through the Central Bank or nationalized commercial banks, are required. The validity period of import licenses varies from 6 to 12 months, according to the commodity.

Imports of some domestically produced items are prohibited, and Government trading companies and agencies account for a substantial amount of total imports. Jute, sugar, tea, and agricultural chemicals are among the officially controlled agricultural imports.

As for tariffs and duties, ad valorem duties predominate. There are also specific duties. Some agricultural implements, machinery, and chemicals are free of duty, but there are high duties for beverages, tobacco, and leather goods. Preferential rates apply to specified products imported from some Arab countries.

Iraq's export policies have not been extensive and usually take the form of controls. Exports are not regularly subsidized but, on occasion, they have been supported. During 1966, no export subsidies were provided.

Iraq is a member of the Arab Common Market.

Agricultural Development and Productivity

Since dates make up one-fifth to one-third of the value of all agricultural exports and are a valuable source of foreign exchange, date exports have been given special attention by the Government.

Recently, Iraq has considerably improved the handling and packing of dates for export, and a program for further industrialization within the date industry is being studied. Projects include modern receiving stations, cold storage plants, a date syrup plant, improved packaging facilities, and production of animal feed.

Iraq's pilot project for growing and milling sugarcane is scheduled for completion in 1970. An important new fertilizer plant at Basra is to be constructed soon.

Irrigation and drainage projects have progressed, and the Ministry of Agrarian Reform allocated $42 million for these projects during 1966/67. Negotiations are underway with the USSR for the erection of a $168 million dam at Haditha on the Euphrates River.

The Agrarian Reform Program, which got off to a rapid start after the Republic was set up in 1958, has not benefited from a follow-up in land distribution and more adequate managerial direction. During 1966, some progress was made in forming cooperatives, and the Agricultural Bank borrowed $980,000 from the Central Bank especially to finance cooperative projects. Since Iraq is deeply committed to the Agrarian Reform Program, continued efforts to promote the Program will be an important part of the agricultural policy.

Agricultural Aid

Since the 1950's, substantial technical assistance has been received from foreign countries. The United States was a big supplier until the change of Government in July 1958. Since that time, Soviet bloc countries have supplied a larger proportion of agricultural aid. In recent years, much of this assistance has been rendered through bilateral assistance and trade agreements. International agencies have also supplied assistance. The U.N. Development Program has sponsored a series of technical assistance and direct support projects.

The United States has given food aid; a Title IV, P.L. 480 agreement was signed on December 19, 1966, to supply 25,000 tons of wheat.

If present patterns continue, more and more bilateral agreements likely will be used in Iraqi trade. (H. Charles Treakle)

ISRAEL

Although agriculture is vital to Israel, it has rarely contributed more than 12 percent of the national income or employed more than 17 percent of the labor force. Agriculture has received favored treatment, and this has resulted in the rapid achievement of self-sufficiency in some items and exportable quantities of others. However, in recent years, the rate of growth of agricultural production has slowed, and many farm settlements are augmenting their income by carrying on processing or light industrial operations which help smooth out the seasonal fluctuations in farm income. For some newer rural settlements on marginal land, agriculture may be subsidiary to the industry or other purposes for which the settlements have been established.

Israel's current economic policy is aimed at improving the country's foreign trade balance. With this as a goal, the pace of economic growth was slowed down in 1965 to relieve the pressure upon manpower and capital resources. These resources were then available to help increase the production of commodities for export or to produce items currently being imported for consumption.

Self-sufficiency in agricultural production for poultry, dairy products, vegetables, and fruits had been achieved by 1962. To avoid surpluses for commodities that could not be exported profitably and to achieve the greatest utility from farm resources, a system of production quotas was introduced. These quotas have not always been effective and some surpluses have resulted. Overall, the agricultural program is geared to Israel's endeavor to obtain maximum utilization of its water resources and to increase cultivated land in cash crops.

Some requests for governmental support of agriculture, comparable to its incentives to industry, have been granted. The Ministry of Agriculture aims to more than double current agricultural exports by 1970. This objective is to be accomplished by stepping up production of avocados, strawberries, citrus fruit, and flowers. The many Government measures, arrangements, and policies affecting agriculture testify to the considerable attention being given to this sector of the economy.

The Arab-Israeli War of 1967 had no noticeable affect on Israeli agricultural policies.

Prices, Markets, and Foreign Trade

Although the Government's long-range intention is to remove controls, price supports and market guarantees are being used to make agriculture financially attractive and prevent inflation. Most of the major agricultural products of Israel come under some form of regulation by price fixing, price support, or subsidy. Methods differ according to the market situation or according to past policies. Eggs and milk have a fixed consumer price, and the maximum price to the producer is fixed by a per unit subsidy within a production quota.

There are many variations in price supports and product subsidies. Eggs are exported only when they can be sold at a price which covers production costs. The

subsidy on export eggs is based on the differential between the net market price abroad and the returns in Israel. There is a minimum producer price for poultry within a quota; slaughter cattle have no quota. As for fresh and export vegetables, price controls vary for a small number of varieties from year to year. For dried vegetables, there is a minimum price for those grown under contract. Producers of peanuts get about 55 percent of the export price after grading. Citrus fruits carry a fixed price at the wholesale level for locally marketed fresh fruit. There is a small subsidy on exported fresh fruit and on culls destined for processing. There are minimum prices for some other fruits and for parts of crops. The subsidy on olives is only on the output for crushing. Tobacco carries a fixed price for any amount. The sugarbeet producer price is fixed for only a limited quantity.

Agricultural Development and Productivity

In recent years there has been some progress in reducing production subsidies. However, drastic changes in subsidies could cause supply problems.

There are three input subsidies directly affecting agriculture: subsidies on chemical fertilizer, irrigation water, and livestock feed (feed grains and oil cake). The chemical fertilizer subsidy, which actually is a subsidy on industrial production aimed at keeping local prices at the level of the international price, is set at a fixed rate per ton of plant nutrient content. The irrigation water subsidy, which varies from area to area, has increased sharply in recent years. The input subsidy for livestock adds about 15 percent to direct subsidies on output for all livestock.

The marketing arrangements for farm commodities vary considerably. To a great extent, they are organized through cooperative and regional groupings. The largest growers' cooperative is Tnuva (Cooperative Center for Marketing of Agricultural Products). In 1966, this cooperative marketed about 70 percent of all fresh farm products, excluding red meat and citrus fruit. Tnuva wholesales, processes, and is increasingly active in exporting farm products, but does not sell them at retail. The other marketing cooperatives are much smaller but are organized on similar lines. Membership in the marketing cooperative is either on a village or individual basis, according to the extent the farming community is organized.

Jewish agriculture is highly organized, and most Jewish farmers belong to one of three large agricultural organizations which have a central service cooperative. The larger farm settlements are multipurpose cooperatives or collectives by nature which are able to offer credit, supplies, machinery, and other services. Agra-Cooperative fulfills a similar function for the independent farmer. The largest of the three farm worker organizations--the Agricultural Workers' Organization--is an affiliate of the Histadrut (General Federation of Jewish Labor), and members of affiliates automatically become members of marketing affiliates such as Tnuva.

The marketing of citrus fruit is done under the Citrus Marketing Board. The Board is selected from the large packers and exporters of citrus fruit with a Government representative as chairman. The Board has a monopoly on all marketing operations in Israel and abroad. It is one of the four marketing boards that had legal status and mandatory powers in 1967. The other three that operate under special laws are: The Poultry and Egg Production and Marketing Board, the Peanut Production and Marketing Board, and the Vegetable Production and Marketing Board. Eight other boards exist on a voluntary basis and are organized mostly as private companies. A law providing a legal framework for all of the production and marketing boards has been proposed and is under consideration. The "private" production and marketing boards function for cotton,

fruit other than citrus, milk, meat, tobacco, olives, flowers and bulbs, and grapes.

These boards have proved to be important instruments for implementing production policies while serving as the farmers' link with the Government. With the exception of the Citrus Board, the boards have not entered local marketing operations except when surpluses have built up. In this way, the status of the marketing cooperatives has not been reduced.

Government regulations also require that feed grains and wheat be sold to the Government at a fixed price, which is usually high enough to bring ready compliance.

Israel's trade policy is built on the assumption that future economic growth will depend upon export earnings; therefore, a wide market potential and free trade is important. Since 1962, a gradual liberalization of import requirements has been adapted. Only about 15 percent of Israel's imports are still subject to individual import licensing. Progressive reduction of customs duties began in November 1966. Under this liberal policy, about one-half of Israel's imports, including many foodstuffs and raw materials. have been completely freed of licensing requirements. An additional third are eligible for licensing under an ''automatic approval'' system. Goods not eligible for either of these two categories must be individually licensed, and some may be prohibited.

Israel's trade objectives influence the tariff policy. Tariffs are nonpreferential. Essential imports are accorded low rates or free entry, while import levies or indirect taxes effectively restrict some imports. High rates may be applied to luxury items. Israel has a single-column import tariff and ad valorem rates predominate, although specific compound rates are also used. Imports of agricultural essentials not produced in the country are duty free but may be subject to other restrictions, such as licensing or quantitive controls. All duties are under regular review and are subject to change. In theory, private importers can import items now imported solely by the Government, but, in fact, they are unable to comply with the requirements for minimum stocks. Wheat, feed grains, oilseeds, vegetable oils, and meat are all items imported only by the Government. Where a Government import monopoly exists, the price is fixed for processors and they, in turn, are required to sell their products at set prices.

Exchange controls are effected through authorized banks, and foreign currency for imports not subject to license is also issued by these banks. Imports under license are countersigned by the exchange control authorities.

Exports are promoted in several ways, including rebates on customs duties, excise taxes, special credit, insurance, subsidies, and bilateral agreements. Like importers, exporters must be licensed, and central marketing boards normally handle exports of citrus fruit, vegetables, peanuts, eggs, and cotton.

Israel had bilateral trade agreements with 10 countries in 1967. Agricultural imports under bilateral agreements have been decreasing while exports under these agreements have been increasing. Bilateral trade accounted for only 8 percent of Israel's agricultural exports in the 1965 trade year. To encourage farm exports, direct subsidies were paid on exported cotton, peanuts, table eggs, and citrus fruits.

Israel is not a member of any regional marketing bloc. In 1964, a nonpreferential trade agreement with the European Economic Community (EEC) was signed. This agreement provided some reduction of European import duties for a few Israeli products such as grapefruit and avocados. These concessions fell short of Israeli hopes and the agreement was allowed to expire on June 30,

1967. Israel and EEC seem unable to define the nature of any future trade agreement--preferential or nonpreferential.

Potentially, Israel could supply a great variety of agricultural products to East European countries, and some trade has been carried on through bilateral agreements. If commodities are available for export, more attention may be given to this market.

As yet, little in the way of trade concessions has been allowed less developed countries. Some products from the Ivory Coast imported prior to July 1, 1967, were allowed a 3- to 6-percent duty reduction. Future concessions of this type are not expected to be extensive.

In 1966, the Ministry of Agriculture produced a 5-year plan that maps agriculture's contributions to development goals. This plan foresees an annual increase of $10 million for agricultural exports, which would require a 50-percent increase in products destined for export. This will require some allotment of means and quotas for production according to economic utility. In the development budget, 12.5 percent has been allocated for agriculture. This new 5-year plan for agricultural development schedules the establishment of 47 regional farms and service plants costing about $25 million, in addition to the expansion of other services.

The Ministry of Agriculture invested about $165,000 in 1967 in research on the growing of subtropical fruits--avocados, mangoes, and persimmons--and spent a like amount on research for hothouse cultivation of flowers and vegetables.

Israel has a highly developed Extension Service in the Ministry of Agriculture. It is organized on a regional basis and has well-trained specialists. There is close cooperation between the Extension Service and agricultural research institutions, and the specialists visit each farming unit at regular planned intervals. In effect, every economic and professional aspect of farming is covered by one or more branches of the service. Computerized planning has been introduced, and through visits, training courses, and field days, the farmers' attention is constantly called to methods which will help to minimize expenses and maximize profits.

Agricultural credit for the settlements is linked to detailed production plans for each participant, and there is close supervision of the village's financial operations. For special investments, such as for the growing of export crops requiring hothouse or packing equipment, easy-term capital and grants are available.

For Jewish rural settlements, long-term lease arrangements through the "Foundation Fund" (Keren Hayesod) and the "National Fund" (Keren Kayemet Le'Israel) have supplied the necessary starting capital for settlements. Accumulated savings and traditional bank credit provide the balance of funds for farmers.

The bulk of Israel's farms are Jewish operated and made up of communal settlements (kibbutzim), cooperative smallholder settlements (moshavim), and privately operated farms (moshavot). About 98 percent of the farmland is Government-owned and leased to users through the Jewish National Fund, an affiliate of the Jewish Agency. The Jewish Agency was the predecessor of the present State of Israel, and after 1948 it became a legal part of the Israeli Government, with responsibility for helping immigrants to settle in Israel. Because of this unusual system, basic problems of land reform do not arise in the Jewish farm sector. This also makes it easier to relocate people to accomodate expansion within the general settlement program, or for whatever purpose is in the national interest.

In the Jewish sector, current measures related to farm structure are aimed, for the

most part, at revising planning policy, handling scarce water resources, meeting crop failures due to frost or drought, controlling agricultural pests, and directing regional activities.

Some of the policies applied to the Jewish agricultural sector are applicable to the Arab sector; however, many are not. When Israel was founded in 1948, about 20 percent of the rural Arab population was semi-nomadic Bedouins who practiced a shifting type of cultivation and extensive livestock production. The remaining 80 percent were settled cultivators ranging from subsistence-type farmers on small holdings to large-scale farmers whose operations were based on sharecropping and hired labor. Though some efforts have been made at settlement and land distribution and water cooperatives have been established, success in the Arab sector has been limited. Earlier land registry records have been lost, and Arab tribal rights and village holdings have complicated the problem.

The general social and income policy of the Government is directed toward discouraging the migration of the rural population. Members of the various forms of cooperatives enjoy full social security as do wage earners and, to some extent, self-employed farmers. Through the Ministry of Agriculture's Extension Service and the cultural departments of the various farmers' organizations, a wide variety of educational and training facilities are offered. These complement the schools of the Ministry of Education.

Agricultural Aid

Israeli agriculture is no longer receiving external assistance except through FAO fellowships. In earlier years, Israel received considerable economic support from world Jewry, German reparation and restitution payments, foreign loans, and foreign technical assistance. A liberal share of this assistance went into the agricultural sector. The United States provided extensive technical assistance to Israeli agriculture for a wide variety of projects until 1962, when operations were phased out due to the high level of production that Israel had attained.

In addition to technical assistance, the United States provided Israel with approximately \$360 million in commodities under P.L. 480 agreements between 1955 and 1966.

Israel has extended foreign aid of its own to underdeveloped countries, mainly in the form of the services of Israeli experts. (H. Charles Treakle)

JORDAN

Jordan's agriculture is based on private enterprise and is likely to remain so. Farmers are mainly smallholders in transition from subsistence to commercial farming. This changeover is seen in the rapid growth in production of such crops as tomatoes, bananas, and citrus fruits, in the spread of mechanization that has taken place over the last 10 or 15 years, and in increased use of fertilizers and improved crop varieties. This transition is also apparent where substantial acreages that formerly were dry-farmed or partially watered have been brought under full year-round irrigation. The Government of Jordan gives increasingly sophisticated support to the development and protection of the country's agriculture. Nevertheless, production always is limited by the scarcity of arable land and often is seriously depressed by drought.

Prices, Markets, and Foreign Trade

There are no price supports for farm production, except when the Supply, Import and Export Department purchases domestically produced wheat from farmers at a set price. At times, prices paid to producers are used as a device to regulate the cost of living in urban centers. But producer prices are not manipulated to stimulate output. There are no subsidies on farm production.

Since 1962, Jordan has had, within its Ministry of National Economy, an Agricultural Marketing Department charged with broad investigatory, regulatory, advisory, and promotional activities in marketing development. With the assistance of a U.N. team of experts, this Department has been conducting intensive educational and training programs with farmers and others connected with marketing services to improve methods and distribution systems for both domestic and foreign sales. In mid-1966, an Agricultural Products Marketing Corporation was established by law to promote compulsory delivery of specific crops and to control trade in fruits and vegetables. Goals are to reduce or prevent loss through such common marketing malpractices as lack of grading, uncoordinated shipments, pricing battles, and erratic quality of exports. Achievements through this action are not as yet measurable, but a beginning has been made.

In general, tariffs on agricultural imports into Jordan are moderate. This applies particularly to cereals, which are frequently obtained from abroad; except for rice, these commodities are admitted free of duty. Local industry is protected, however, by high import duties on animal and vegetable fats and oils, lard, other prepared edible fats (73 percent of c.i.f. value plus other fees and charges), and cigarettes ($5.06 a pound plus other fees and charges).

Imports are controlled by Government-issued import licenses, which release the needed foreign exchange to the importer. There is no state trading other than for P.L. 480 grain imports from the United States which the Jordanian Government imports on its own account and resells to the trade. There are no export subsidies.

Jordan has concluded a number of bilateral trade agreements with the objective of developing more favorable mutual relations with other countries. These agreements have been made with the Sudan, Ethiopia, Yugoslavia, India, the Syrian Arab Republic, and Iraq. Jordan is not a member of a clearing union and does not belong to a free trade area. A participant in the Arab Common Market, Jordan gives and receives concessions in dealing with other member nations. There is no trade with Israel. In trade with other non-Arab countries, Jordan tends to favor procurement from the West.

Agricultural Development and Productivity

Principal agricultural targets outlined in Jordan's Development Plan for 1964-70 are:

(1) to control soil erosion through terracing, afforestation, watershed management, and controlled grazing;

(2) to bring irrigation to full potential;

(3) to increase production of specific crops and livestock products;

(4) to add 92,000 acres to the land presently in vines, fruit trees, and olives;

(5) to investigate new crops, such as safflower, sugarbeets, and cut flowers;

(6) to fill remaining gaps in the national road network;

(7) to improve marketing channels progressively; and

(8) to promote exports.

Given the country's present absorptive capacity and degree of economic development, the total Government input into the agricultural sector and related fields of activity has been creditable and reasonably well suited to local needs.

The Ministry of Agriculture actively trains farmers in modern agricultural techniques primarily through its Agricultural Extension Department. Other departments such as Research also offer instruction. Countrywide projects sponsored by the Agency for International Development in both agricultural extension and research terminated recently. These projects are being carried on independently by the Ministry of Agriculture.

While only a small percentage of Jordanian farmers receive credit at reasonable rates and terms, gains are being made in the provision of institutional credit through two agencies: the Agricultural Credit Corporation, which offers long-term and medium-term credit, and the Jordan Central Cooperative Union, which arranges short-term loans for up to 1 year.

Some problems arising from fragmentation of farmlands still remain. According to Muslim custom, even small plots must be equally divided among inheritors. Over time, this has reduced many holdings far below viable limits.

Jordan has a land reform project in the East Ghor irrigation area of the Jordan Valley. Here, the Government has consolidated farm ownership and combined and redistributed land according to priorities established by law. The maximum amount of land per individual is 50 acres. Original owners are compensated for the loss of their land over a 10-year period; new allottees have 20 years in which to pay for their holdings.

There are mortgage laws and credit arrangements for sale and resale of real estate in Jordan. But effective implementation of the law is limited in scope.

Land in dry-farmed field crops is not taxed. Annual taxes computed on a sliding scale are levied on irrigated farms, banana and citrus groves, and other fruit plantations. There is no head tax on indigenous farm animals. But taxes and other charges, such as veterinary, water, and quarantine fees, are collected on imported livestock. Draft animals are exempt from customs duty.

Education and training facilities are available to most Jordanian farm people. There is some indication, however, that as a result of steady improvement in educational standards and opportunities, some shift from agriculture to other occupations has occurred among Jordan's farmers.

Agricultural Aid

The Jordanian Government has received substantial aid in the development of its agricultural economy from the United States and, to a lesser degree, from other countries, including the United Kingdom, Denmark, France, and West Germany, as well as Saudi Arabia, Kuwait, and other Arab League nations. The United Nations and other world institutions also have been active.

Since 1952, the United States has operated a large number of technical assistance programs, including those focused directly on agriculture. In addition, the U.S. Government has furnished the Government of Jordan budgetary support, some of which has been indirectly utilized for agricultural improvements. More recently, U.S. technical assistance to agriculture in Jordan has been centered in the East Ghor Rural Development Project in the Jordan Valley.

Following years of drought, the United States periodically has made up Jordanian

grain deficits, shipping under the provisions of Title I, P.L. 480. In fiscal year 1966, concessional sales were made for the first time under Title IV of the same law.

The United Kingdom has provided the technical services of nine advisors, including an agricultural engineer, water engineer, and the engineer-manager for the Water Boards of Jordan's Natural Resources Authority. The United Kingdom has recently extended assistance to the Natural Resources Authority in the construction of two small dams at Wadi Shu'aib and Kufrain in the Jordan Valley.

About $6 million in loan funds from West Germany have been provided for erection of a special wharf at Aqaba to handle export of phosphates and the construction of a railroad line from Ma'an to Aqaba. Denmark is lending $1.7 million to underwrite costs of establishing a slaughterhouse, a compost plant, dairies, cold storage facilities, food processing plants, and improvements in fisheries. France also has given some technical assistance.

Over $11 million in Kuwaiti funds are being used for such activities as a Jordan water agronomic study, a Maqarin Dam survey, the Mukheibeh-North Shouneh hydroelectric power plant, and an 18-mile extension of the East Ghor Canal. Saudi Arabia is contributing $14 million under a loan agreement for expansion of Jordan's highways. A grant of nearly $32 million for construction of the Khaled Ben Il-Walid (Mukheibeh) Dam has been made by the Arab League.

International development assistance funds have supported Jordan's Agricultural Credit Corporation in its efforts to provide farmers with credit for upgrading their holdings. U.N. institutions have assisted in soil conservation, olive tree planting, Bedouin resettlement, range management, layout and improvement of farm roads, planting of village woodlots, and a wide range of related extension and research projects. (Henrietta H. Tegeler)

LEBANON

The Lebanese economy is largely based on private enterprise, with minimal Government restriction on international or domestic economic activity. Receipts from commerce, along with those from industry, transit revenues, tourism and other sources, contribute nearly 85 percent of the national income. But Government policy does not neglect measures to upgrade the agricultural sector through improving farming techniques, diversifying and safeguarding domestic production, and increasing agricultural exports.

Prices, Markets, and Foreign Trade

The Government of Lebanon fixes farm prices for wheat and barley through the Office of Cereals and Sugar Beets (formerly the Wheat Office). In January 1967, the Government extended the prerogatives of this agency, authorizing it to organize Lebanon's bread supply; to develop local production of cereals and sugarbeets and secure sales of these commodities at support prices without prejudice to the consumer; and to import wheat on its own account when necessary.

The predecessor agency to OCSB had long been charged with purchase of local wheat and barley at support prices. During the 1966/67 marketing season (through March 1967), only 9,000 tons of wheat were bought from Lebanese farmers under the support program, compared with 13,000 tons the previous year. This reduction occurred because local grain merchants offered comparable pricing schedules with less redtape. Farmers

sold all of their barley to the trade, which paid an average of about $6 a ton above Government support prices of $54 to $61 a ton.

Official farm purchase prices offered farmers by Lebanon's Tobacco Monopoly are established each year by the Ministry of Finance. As part of a Government effort to discourage illegal cultivation of hashish (Indian hemp), a price support program for an alternative crop, sunflowerseed, was initiated. The 1967 purchase price for sunflowerseed was fixed at the equivalent of 11.1 cents a pound.

Lebanon does not directly subsidize agricultural production. But in late 1966, the Wheat Office sold at cost 276 tons of fertilizers to farmers in 20 villages in the Bekaa Valley and South Lebanon. These sites were especially chosen for pilot programs to teach farmers to produce fertilized wheat and barley under the supervision of the Ministry of Agriculture. Selling price per pound for the fertilizers used was fixed at the equivalent of 2.9 cents for ammonium sulfate, 2.7 cents for ammonium nitrate, 1.6 cents for superphosphates, and 3.3 cents for potassium sulfate. The farmers paid 25 percent of the value of the fertilizer in cash; the balance was to be collected at harvesttime.

In 1966, the Ministry of Agriculture distributed free pesticides to combat cycloconium oleaginum of the olive tree as well as to control field rodents, grasshoppers, senn pest, wheat leaf miner, and apple scab. Military helicopters were used to spray in open fields.

Acreage in tobacco and tombac (strong, dark, native tobacco, also called tumbaki) is controlled by law, and growers are required to deliver their output to the Tobacco Monopoly. In 1966, acreage in each crop was increased to provide for stepped-up home requirements and export needs, as well to reduce dependency on tombac imports from Iran.

Lebanon's port, Beirut, has a foreign trade zone through which goods may be transshipped or reexported duty free. Tariff regulations provide for a free market and a liberal trade control policy. Price and quality largely control imports. Import duties are held low on raw materials and noncompetitive commodities. Essential imports, such as wheat and flour, are duty free. But variable duties are levied on most other agricultural imports at preferential, normal, or maximum rates, depending on source, as provided under the existing tariff schedule. Agricultural products may be exempted from customs duties or subject to reduced rates for stated periods under the varying terms of current bilateral agreements. Also, import duties may be eliminated for such purposes as the encouragement of wider use of imported feed grains or the introduction of new crops or crop varieties. Import licenses are required for wheat, most other grains, poultry, some processed foods, and other items which are also produced domestically. Exchange permits are not required for any imports. Export subsidies are paid on Lebanese apples sold abroad, the amount of this subsidy varying according to the country of destination, method of shipment, and quantity of apples exported. A number of basic Lebanese farm products, including meat, grains, sugar, and fats and oils, are subject to export licensing.

Lebanon usually has operative longstanding bilateral agreements with fellow Arab States; agreements with the United Arab Republic (Egypt) and Jordan were extended again in 1966. Basic tenets of these arrangements are to minimize or eliminate import duties on a variety of farm goods in intra-Arab trading; reduce customs duties on some industrial commodities; extend preferential treatment in issuing import and export licenses; and, under regulation, make use of all available transit facilities for trade.

Except with Israel, Lebanon's non-Arab trade is global in scope. In March 1967, negotiations were initiated for a new agreement with the European Economic Community. The former agreement was based on exchange trade and technical cooperation among developed and underdeveloped countries. The proposed new agreement stresses an adequate exchange trade designed to reduce the great yearly deficit in Lebanon's trade balance with the six EEC member states; it solicits the aid of the EEC to increase and improve the capacity of Lebanese agriculture, industry, and tourism; it seeks to obtain commercial credits by implementing a state credit-insurance system; and urges that EEC members increase their capital investment in Lebanon mainly by creating joint Lebanese-EEC enterprises.

Lebanon has clearing agreements with several Soviet bloc countries.

Agricultural Development and Productivity

Total costs for economic development during the current 5-year plan (1965-69) are estimated at about $355 million; of this, about $95 million in additional advances and loans will be required above budgetary allocations. Requirements for agriculture and irrigation together account for 17 percent of budget allocations for all purposes and about the same proportion of total estimated costs.

Projects to provide additional irrigation and electricity are stressed in Lebanon's rural development. Plans for 1965-69 are to provide additional water for over 65,000 acres throughout the country. Progress is being made under the Green Plan land reclamation program. For example, nearly 360,000 fruit trees and cuttings were distributed in 1966 to farmers whose lands were developed by the Green Plan, compared with 125,000 the previous year.

A number of agricultural research centers, which concentrate mainly on horticulture, grains, tobacco, and dairy and poultry farming, are maintained by the Lebanese Government.

Agricultural Aid

With the aid of foreign technicians, Lebanon's extension programs have advanced well. The United States began to phase out its technical assistance after 1962 when a relatively high degree of development had been reached. France and the United Kingdom have since offered technical assistance, as well as training scholarships abroad, to Lebanese farmers.

The Special Fund of the United Nations has granted several scholarships to agronomists connected with the operation of the Green Plan. Also, FAO granted a year's training program in soil fertility to be given mainly in the United States to an agronomist in the Scientific Agricultural Research Service. Under the Regional Training Program of the Agency for International Development at the American University of Beirut, nine scholarships in the field of agriculture were granted to Lebanese students for the 1965/66 academic year.

Late in 1966, an agreement was reached under the FAO World Food Program to supply Lebanese Green Plan farmers with selected seed wheat worth more than $1 million. United Nations and Lebanese experts were expected to collaborate in a $2.6 million plan to prospect for underground water. (Henrietta H. Tegeler)

The agricultural policy of the Syrian Arab Republic is focused on converting the agricultural sector of the economy, long supported by free enterprise, into one based on socialism. Plans for agricultural development rest on stringent state control and management of the major components of farming--production, finance, marketing, prices, foreign trade, and stocks. There are ambitious Government programs for agricultural reform and redistribution of wealth. Social ownership of the main means of production--land and water--is stressed, as is greater and speedier development and diversification of crops. Particular emphasis is placed on output of livestock, poultry, tobacco, vegetables, citrus fruits, sugarbeets, and olives.

Among the physical conditions that have given direction to the formation of Syria's agricultural policy over recent years are the following: (1) More than half of the nation's total area of 46 million acres is unsuitable for agriculture; (2) over 90 percent of the 20 million acres that might be used for farming purposes (if fully exploited) is unirrigated and therefore susceptible to drought; and (3) about 6 million acres of the agricultural land lie fallow each year, and another 5 million acres are unused.

Lately, there has been a critical shortage in Syria's technical agricultural cadre and in the farm labor force due to migratory movement to neighboring Arab countries where higher wages and improved conditions prevail. There are serious deficiencies in low-cost railroad transport and good highway networks to and from farm production centers, as well as a shortage of heavy transport vehicles. Because of declining imports of machinery and spare parts, there has been a recent trend away from the mechanized farming that triggered agricultural expansion a decade ago. Cooperative farms extensive enough to take advantage of large-scale farming methods have declined. Private interest in other forms of agricultural investment appears to have slackened as well.

Prices, Markets, and Foreign Trade

Wholesale prices of all agricultural products are fixed by the Ministry of Supply. In 1966, the Ministry made a comprehensive study of every farm commodity produced in the country, fixed its price, and kept watch over the internal market for illegal deviations. Retail prices were either controlled outright, as in the case of flour, bread, sugar, rice, edible oils, and tobacco, or subject to control in the event of sharp increases, as for meat, wheat, and feed grains. The Syrian Government established support prices for wheat, barley, cotton, and tobacco--the nation's most valuable farm commodities--in order to stabilize prices and stimulate production. Fixed sales prices for all other farm goods acted as a "support" price since these allowed marginal profits after expenses.

In 1966, there were no payments to producers for acreage and production controls. But small subsidies were paid to farmers to encourage use of fertilizers, sprays, quality seed, and similar production aids for crops such as wheat, cotton, and tobacco. The consumer benefited from these nominal subsidies by paying a retail price that had been reduced by Government decree.

Syria's internal marketing system suffers from inadequacies in supplies of goods, staff to handle the public sector of trade, storage and transportation facilities, and foreign currencies for imports. These factors have created an atmosphere of general instability; wide fluctuations in prices in different localities have occurred in spite of Government controls. The Government's increasingly active role in the management of

the economy is bringing about changes in the marketing of farm products.

Syria follows a restrictive trading policy. Early in 1965, trading of cotton, wheat, wheat flour, barley, and corn was transferred from the hands of private merchants to the Government. These commodities, along with tobacco, make up 90 percent of all farm exports. (The tobacco trade has been a state monopoly since its organization in the early 1930's when Syria was under a French mandate.) All exports of agricultural commodities are licensed, and most licensed export commodities are subject to a farm production tax of 9 percent on a controlled wholesale price fixed by the Ministry of Finance for every farm product in the country. Exceptions are olive oil, with a 5-percent production tax, and ginned cotton, which is assessed the regular 9-percent production tax plus a 12.5-percent tax based on actual sales price f.o.b.

The State Import-Export Company (SIMEX) and other Government organizations control about 80 percent of all Syrian imports. Due to the drought in 1966, the public sector was permitted to import duty free previously restricted farm products, such as wheat and feed grains. Imports of unrestricted food products are subject to high specific and ad valorem duties and to prior license requirements. Taxes or customs duty rates vary but all imports are subject to the following:

(1) consumption tax of 4 percent on the sales price;

(2) census tax of 4 percent on the sales price;

(3) school tax of 2 percent on the customs duty tax and 10 percent on the consumption tax;

(4) port tax of 3 percent on the customs duty tax;

(5) maritime transportation tax of 0.002 percent on the sales price; and

(6) defense tax of 4 percent on the sales price.

All agricultural commodities exported or imported are subject to licensing except those transactions carried out by state trading or trade monopolies. Trade by the private sector is further restricted by Government quantitative controls and other limitations. With some exceptions, export transactions by Syrians are subject to repatriation of the foreign exchange earned, to be paid to the Central Bank in the currency stipulated in the original contract. Nonresidents are permitted to pay the Central Bank in Syrian pounds, without regard for the currency stipulated in the contract.

To continue to receive foreign technical assistance for the development of agricultural schemes such as the Euphrates Dam project, and also to insure markets for excess farm commodities, Syria has concluded a series of bilateral trade and economic agreements in recent years. Since 1957, there has been a progressive shift away from trade with the West. This has slowed down transactions with Free World countries and limited their exports to Syria.

Eighty percent of Syria's foreign trade and all of the agricultural industry were nationalized in 1965. At that time, all export subsidies established previously under the free-enterprise system were automatically nullified.

Syria is a member of the Arab Common Market, which usually is an outlet for about one-third of Syrian exports by value and the source of about 15 percent of Syrian imports. As with the Communist bloc, Syria's trade relations with other Arab League nations and Afro-Asian countries have been functioning on a bilateral agreement basis for some years. Syria does not trade with Israel.

In 1966, special trade concessions given by Syria to less developed countries were

limited to the Arab League members and the "Socialist" Afro-Asian countries through bilateral trade and economic agreements.

Agricultural Development and Productivity

Nearly 30 percent of the $1.2 billion allocated for economic development during Syria's second 5-year plan, 1966-70, is earmarked for agriculture, including irrigation and land reclamation. In the first 5-year plan, 1960-65, 53 percent of the agricultural allocation was actually spent.

Syria's agricultural development plans recently have concentrated on the continuation of programs started in earlier years. These include irrigation and land reclamation projects, such as the Euphrates Dam, the Sinn, Yarmouk, Upper Orontes, and the Ghab-Asharney projects, and the Rouj swamp reclamation. Other plans point to extension activities at village levels, seed improvement, modernization of animal husbandry, provision of desert water and fodder, and an agricultural census.

Recent Government measures to improve farming efficiency and to promote technological progress appear to have moved slowly and with little effect. This is attributed to political and economic instability and to reluctance on the part of farmers to join cooperative societies, a prerequisite since 1965 to receipt of new lands under Syria's agrarian reform program begun in the late 1950's. Since nationalization of foreign trade in 1965, agricultural credit has been available only through state-owned banks, thus disrupting the merchant-middleman-farmer relationship that had been traditional in Syria. Government loans have been described as limited in scope and, frequently, delayed far beyond the point of maximum usefulness.

The Syrian farm structure is Socialist, largely operating on a semisubsistence basis within the framework of direct Government control of the means of production, marketing, and finance. Lately, there has been evidence that subdivision of large estates under the agrarian reform program, combined with primitive small-scale cultivation, has increased costs of production and marketing of some major crops, such as wheat, barley, and cotton. Measures for consolidating the fragmented farms and for resettling farmers have been strongly opposed by the rural population.

The present Syrian Government has been fully occupied with changing the structure of the national economy, and has had little opportunity to strengthen agricultural education and training facilities. Progress achieved in these fields in the last few years has been the outcome of efforts and expenditures made earlier. The Government plans to increase educational facilities and training efficiency during the second 5-year plan.

Agricultural Aid

Active economic and technical assistance agreements of the Syrian Government with foreign countries include the following:

USSR--Soviet financing of the Euphrates Dam project, the Kamishli-Aleppo-Latakia railroad project (1957 and 1960), the fertilizer plant at Homs (1965), and various water and fodder projects.

France--A loan of $50 million to the Syrian Government to build roads and airports (1962).

Mainland China--A loan of 70 million Swiss francs (the equivalent of $16 million) to the Syrian Government (1963).

Poland--A loan of $25 million to the Syrian Government (1965).

Czechoslovakia--Czech construction of a sugar refinery at Ghab (1964).

U.S. aid to Syria has mainly taken the form of small technical assistance projects and occasional shipments of agricultural commodities under P.L. 480 to alleviate drought-induced shortages. (Henrietta H. Tegeler)

TURKEY

No sweeping changes in Turkish agricultural policies have been made over the past few years except in the field of price intervention. However, recent legislation has placed heavy stress on raising the technical level of agriculture.

In a program enchanced by a considerable amount of U.S. technical aid, the Turkish Government in the past 2 years has promoted the adoption of new varieties of wheat in the southern and western coastal provinces. These new varieties, popularly known as Mexican wheats, have been teamed with increased usage of fertilizer and other improved cultural practices to raise wheat production to a significantly higher level in the areas to which they are adapted.

Prices, Markets, and Foreign Trade

Administration of Government farm credits and price intervention for farm goods, with the exception of tobacco, is centered in the Ministry of Commerce. Grains, tobacco, sugarbeets, filberts, and opium gum are the traditional items for which the Turkish Government has participated in price intervention. Raisins were included in the price intervention list in 1963 when Turkey joined with Greece and Australia in an agreement aimed at stabilizing raisin export prices. In 1966, five new commodities--rice, figs, seed cotton, olive oil, and sunflowerseed--were added to the traditional list; indications are that the Government will participate only minimally in the marketing of these new items.

Government price intervention on all commodities is, to some extent, an attempt to assure stable producer prices on one hand and adequate consumer supplies on the other. In practice, domestic considerations govern price intervention only for grains, sugarbeets, and tea. For the other commodities involved, price intervention is heavily influenced by the course of exports. The Government's basic goal is to maximize export prices over the short run, that is, after considering Turkish and world supplies. The spate of new commodities added to the domestic intervention list and the elimination of minimum export prices signal a shift in intervention location; but for most commodities, the goal still is to control the price of exports.

Production controls are nonexistent in Turkey, except in the case of opium, sugarbeets, and to a limited extent, tobacco.

Imports are governed closely by both tariff and nontariff controls. Except in the case of merino wool (greasy basis), coffee, and cattle hides, tariff levies usually represent the different between domestic prices and import prices. But price shifts in Turkey and in world markets since the levies were established have created some deviations. In addition to the tariff levies, taxes, principally municipal taxes, have had the effect of increasing prices of imports to a prohibitive level. Exceptions are greasy merino wool, coffee, hides, and, recently, tallow.

The Government of Turkey does not levy import duties on Title I, P.L. 480 purchases. But the Government's distributing agencies mark up prices by amounts which are approximately equivalent to the import levies. In 1967, the markup on wheat was in excess of the import levy.

Nontariff control is exercised through biannual import programs. Imports under Public Law 480 have been included under a special category along with such items as international credits. Categories under the "normal import program" are separately listed as liberalized imports, commodites subject to hard currency allocations, and quotas for bilateral agreement countries.

Thus far, only small quantities of agricultural products have been imported under the normal import program categories. These products have been imported primarily because of hard currency shortages and because of their availability under the special category. However, recent commercial imports of relatively small quantities of soybean oil, tallow, and rice have been allocated under the miscellaneous quota of the Ministry of Commerce.

Calf hides, greasy merino wool, and unroasted coffee beans are included in the allocation list. The wool allocation is at the disposal of the Ministry of Industry; coffee is handled by the Ministry of Customs and Monopolies. Cattle and calf hides are carried in both liberalized and allocation lists.

Turkey is an associate member of the European Common Market. Under this arrangement, quotas have been established for four important Turkish farm exports--tobacco, filberts, raisins, and figs. These commodities enjoy preferential rates under set quotas of the European Economic Community. On December 1, 1967, the EEC extended tariff preferences to some additional Turkish exports, including citrus fruit, olive oil, grapes, and wine. Quotas for these and other commodities are subject to review.

Bilateral trade arrangements with clearing agreements cover Turkish trade with the United Arab Republic, Israel, and East European countries. The East European countries account for the greatest part of this trade. Although very few agricultural commodities are imported under the bilateral agreements in force, Turkish export quotas established under them are predominantly agricultural. Even though actual exports have reached only 45 to 65 percent of quota levels, agricultural exports to bilateral agreement countries are increasing rapidly.

Agricultural Development and Productivity

Turkish planning for agricultural development revolves on a 5-year cycle supplemented by annual programs. A 7-percent gain per year is projected in both total gross national product and the contribution of the agricultural sector to GNP. Basic tenets of the second Five-Year Plan for 1968-72 are to reduce the farmers' dependence on weather in increasing farm output and to encourage production of export commodities. Increased agricultural inputs, particularly rapid and substantial increases in the use of fertilizer and irrigation, are called for, along with revisions in agricultural credit policy and adjustments in minimum pricing policy to enable farmers to secure the most advantageous means of production. Advances in cooperative farming are envisaged. If these recommendations are to be effectively implemented, increased Government spending for agricultural development is required.

Subsidies employed to encourage farmers to modernize and expand production include the purchase of nitrogeneous fertilizer and seed at or below cost; free or below cost use of pooled machinery; agricultural credit at rates sufficient to cover administrative expenses but well below the general market interest rate; and free Government control measures to prevent tobacco mildew epidemics and grasshopper plagues. There is also an export subsidy on sugar equal to the difference in world market price and the domestic price.

Most agricultural credit is extended through the Agricultural Bank. Agricultural credit allocations from this institution totaled $445 million in 1966, and nearly $570 million the following year.

The Central Bank offers a direct line of credit to the Soils Products Office, which attempts to stabilize the market and assure adequate grain supplies by price intervention.

In 1960, there were six agricultural technical schools on the elementary level in Turkey, three regional secondary schools, one school specializing in use of agricultural machinery, one specializing in animal husbandry, and one for training foresters. Five regional agricultural schools were established between 1963 and 1965, and a school for home economics has been established in Ankara. Two agricultural technical schools, two animal husbandry schools, and two schools for forest technicians are underway.

Land reform is called for in the Constitution. However, it received only minor consideration in the 1962-67 Five-Year Plan. Ultimate goals are to provide farmers with holdings large enough for the best use of family labor--minimum and maximum farm sizes to be determined according to types of soil and climatic conditions. Plans are to base sharecropping and tenancy rights on contracts, regulate share production and investment outlays, and prevent further subdivision of small farm plots, consolidate fragmented holdings, and grant farmers special improvement loans.

Turkey's social security benefits do not apply to farmworkers except those who qualify through the Army Mutual Fund. However, the contemplated revision of this system recognizes the desirability of including farmers and farmworkers in the social security scheme.

Plan officials, aware of the need for both regional and community development, hope to effect a more equitable distribution of investments in public and social services among regions of greatest potential, backward areas, and urban communities. It is the aim of the Government to encourage rural people to take an active role in village investments by operating public services or organizing cooperatives and institutions. These programs are designed not only to stimulate good relations between the Government administration and the people but to help alleviate serious underemployment in agriculture in many rural areas.

Agricultural Aid

Since World War II, the United States has provided Turkey with large amounts of financial assistance. Direct financial allocations for agricultural development have been relatively modest, mainly confined to less than $120 million in U.S. funds used to support Turkey's mechanization program in the early 1950's. The United States has maintained a large technical assistance program in Turkey; now U.S. interests focus largely on the Mexican wheat programs, the expansion of irrigation, and improvement of Turkish facilities for agricultural extension, research, and education. Since 1954, the United States has shipped, under Title I, P.L. 480, farm products valued well in excess of half a billion dollars while helping to fill Turkish food needs and animal feed deficiencies.

Foreign exchange for implementing Turkey's 5-year plans is directed primarily through the Aid for Turkey Consortium set up under the auspicies of the Organization for Economic Cooperation and Development in 1962.

In its development programs, Turkey is receiving aid also from the International Development Association and the International Monetary Fund. With Iran, Pakistan, and the United Kingdom, Turkey is a member of the Central Treaty Organization which seeks peaceful economic development through cooperative effort. (Henrietta H. Tegeler)

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